

FEDERAL OPERATING PERMIT

A FEDERAL OPERATING PERMIT IS HEREBY ISSUED TO
Hays Energy, LLC

AUTHORIZING THE OPERATION OF
Hays Energy Facility
Fossil Fuel Electric Power Generation

LOCATED AT
Hays County, Texas
Latitude 29° 46' 50" Longitude 97° 59' 22"
Regulated Entity Number: RN100211689

This permit is issued in accordance with and subject to the Texas Clean Air Act (TCAA), Chapter 382 of the Texas Health and Safety Code and Title 30 Texas Administrative Code Chapter 122 (30 TAC Chapter 122), Federal Operating Permits. Under 30 TAC Chapter 122, this permit constitutes the permit holder's authority to operate the site, emission units and affected source listed in this permit. Operations of the site, emission units and affected source listed in this permit are subject to all additional rules or amended rules and orders of the Commission pursuant to the TCAA.

This permit does not relieve the permit holder from the responsibility of obtaining New Source Review authorization for new, modified, or existing facilities in accordance with 30 TAC Chapter 116, Control of Air Pollution by Permits for New Construction or Modification.

The site, emission units and affected source authorized by this permit shall be operated in accordance with 30 TAC Chapter 122, the general terms and conditions, special terms and conditions, and attachments contained herein.

This permit shall expire five years from the date of issuance. The renewal requirements specified in 30 TAC § 122.241 must be satisfied in order to renew the authorization to operate the site, emission units and affected source.

Permit No: 02079 Issuance Date: _____

For the Commission

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General Terms and Conditions

The permit holder shall comply with all terms and conditions contained in 30 TAC § 122.143 (General Terms and Conditions), 30 TAC § 122.144 (Recordkeeping Terms and Conditions), 30 TAC § 122.145 (Reporting Terms and Conditions), and 30 TAC § 122.146 (Compliance Certification Terms and Conditions).

In accordance with 30 TAC § 122.144(1), records of required monitoring data and support information required by this permit, or any applicable requirement codified in this permit, are required to be maintained for a period of five years from the date of the monitoring report, sample, or application unless a longer data retention period is specified in an applicable requirement. The five year record retention period supersedes any less stringent retention requirement that may be specified in a condition of a permit identified in the New Source Review Authorization attachment.

If the permit holder chooses to demonstrate that this permit is no longer required, a written request to void this permit shall be submitted to the Texas Commission on Environmental Quality (TCEQ) by the Responsible Official in accordance with 30 TAC § 122.161(e). The permit holder shall comply with the permit's requirements, including compliance certification and deviation reporting, until notified by the TCEQ that this permit is voided.

The permit holder shall comply with 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit.

All reports required by this permit, except for reports required solely by the Acid Rain permit or the Cross-State Air Pollution Rule trading program, unless they are being used to demonstrate compliance with another requirement, must include in the submittal a cover letter which identifies the following information: company name, TCEQ regulated entity number, air account number (if assigned), site name, area name (if applicable), and Air Permits Division permit number(s).

Special Terms and Conditions:

Emission Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting

1. Permit holder shall comply with the following requirements:
 - A. Emission units (including groups and processes) in the Applicable Requirements Summary attachment shall meet the limitations, standards, equipment specifications, monitoring, recordkeeping, reporting, testing, and other requirements listed in the Applicable Requirements Summary attachment to assure compliance with the permit.
 - B. The textual description in the column titled "Textual Description" in the Applicable Requirements Summary attachment is not enforceable and is not deemed as a substitute for the actual regulatory language. The Textual Description is provided for information purposes only.
 - C. A citation listed on the Applicable Requirements Summary attachment, which has a notation [G] listed before it, shall include the referenced section and subsection for all commission rules, or paragraphs for all federal and state regulations and all subordinate paragraphs, subparagraphs and clauses, subclauses, and items contained within the referenced citation as applicable requirements.
 - D. When a grouped citation, notated with a [G] in the Applicable Requirements Summary, contains multiple compliance options, the permit holder must keep records of when each compliance option was used.

- E. Emission units subject to 40 CFR Part 63, Subpart ZZZZ as identified in the attached Applicable Requirements Summary table are subject to 30 TAC Chapter 113, Subchapter C, §113.1090 which incorporates the 40 CFR Part 63 Subpart by reference.
 - F. For the purpose of generating discrete emission reduction credits through 30 TAC Chapter 101, Subchapter H, Division 4 (Discrete Emission Credit Banking and Trading), the permit holder shall comply with the following requirements:
 - (i) Title 30 TAC § 101.372 (relating to General Provisions)
 - (ii) Title 30 TAC § 101.373 (relating to Discrete Emission Reduction Credit Generation and Certification)
 - (iii) Title 30 TAC § 101.374 (relating to Mobile Discrete Emission Reduction Credit Generation and Certification)
 - (iv) Title 30 TAC § 101.378 (relating to Discrete Emission Credit Banking and Trading)
 - (v) The terms and conditions by which the emission limits are established to generate the discrete reduction credit are applicable requirements of this permit
2. The permit holder shall comply with the following sections of 30 TAC Chapter 101 (General Air Quality Rules):
- A. Title 30 TAC § 101.1 (relating to Definitions), insofar as the terms defined in this section are used to define the terms used in other applicable requirements
 - B. Title 30 TAC § 101.3 (relating to Circumvention)
 - C. Title 30 TAC § 101.8 (relating to Sampling), if such action has been requested by the TCEQ
 - D. Title 30 TAC § 101.9 (relating to Sampling Ports), if such action has been requested by the TCEQ
 - E. Title 30 TAC § 101.10 (relating to Emissions Inventory Requirements)
 - F. Title 30 TAC § 101.201 (relating to Emission Event Reporting and Recordkeeping Requirements)
 - G. Title 30 TAC § 101.211 (relating to Scheduled Maintenance, Start-up, and Shutdown Reporting and Recordkeeping Requirements)
 - H. Title 30 TAC § 101.221 (relating to Operational Requirements)
 - I. Title 30 TAC § 101.222 (relating to Demonstrations)
 - J. Title 30 TAC § 101.223 (relating to Actions to Reduce Excessive Emissions)
3. Permit holder shall comply with the following requirements of 30 TAC Chapter 111:
- A. Visible emissions from stationary vents with a flow rate of less than 100,000 actual cubic feet per minute and constructed after January 31, 1972 that are not listed in the Applicable Requirements Summary attachment for 30 TAC Chapter 111, Subchapter A,

Division 1, shall not exceed 20% opacity averaged over a six-minute period. The permit holder shall comply with the following requirements for stationary vents at the site subject to this standard:

- (i) Title 30 TAC § 111.111(a)(1)(B) (relating to Requirements for Specified Sources)
- (ii) Title 30 TAC § 111.111(a)(1)(E)
- (iii) Title 30 TAC § 111.111(a)(1)(F)(i), (ii), (iii), or (iv)
- (iv) For emission units with vent emissions subject to 30 TAC § 111.111(a)(1)(B), complying with 30 TAC § 111.111(a)(1)(F)(ii), (iii), or (iv), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146. These periodic monitoring requirements do not apply to vents that are not capable of producing visible emissions such as vents that emit only colorless VOCs; vents from non-fuming liquids; vents that provide passive ventilation, such as plumbing vents; or vent emissions from any other source that does not obstruct the transmission of light. Vents, as specified in the "Applicable Requirements Summary" attachment, that are subject to the emission limitation of 30 TAC § 111.111(a)(1)(B) are not subject to the following periodic monitoring requirements:
 - (1) An observation of stationary vents from emission units in operation shall be conducted at least once during each calendar quarter unless the emission unit is not operating for the entire quarter.
 - (2) For stationary vents from a combustion source, if an alternative to the normally fired fuel is fired for a period greater than or equal to 24 consecutive hours, the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are present. If such period is greater than 3 months, observations shall be conducted once during each quarter. Supplementing the normally fired fuel with natural gas or fuel gas to increase the net heating value to the minimum required value does not constitute creation of an alternative fuel.
 - (3) Records of all observations shall be maintained.
 - (4) Visible emissions observations of emission units operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of emission units operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions observations shall be made during times when the activities described in 30 TAC § 111.111(a)(1)(E) are not taking place. Visible emissions shall be determined with each stationary vent in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each stationary vent during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance

from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.

(5) Compliance Certification:

- (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(1) and (a)(1)(B).
- (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(1)(F) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.
- (c) Some vents may be subject to multiple visible emission or monitoring requirements. All credible data must be considered when certifying compliance with this requirement even if the observation or monitoring was performed to demonstrate compliance with a different requirement.

B. For visible emissions from a building, enclosed facility, or other structure; the permit holder shall comply with the following requirements:

- (i) Title 30 TAC § 111.111(a)(7)(A) (relating to Requirements for Specified Sources)
- (ii) Title 30 TAC § 111.111(a)(7)(B)(i) or (ii)
- (iii) For a building containing an air emission source, enclosed facility, or other structure containing or associated with an air emission source subject to 30 TAC § 111.111(a)(7)(A), complying with 30 TAC § 111.111(a)(7)(B)(i) or (ii), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146:
 - (1) An observation of visible emissions from a building containing an air emission source, enclosed facility, or other structure containing or associated with an air emission source which is required to comply with 30 TAC § 111.111(a)(7)(A) shall be conducted at least once during each calendar quarter unless the air emission source or enclosed facility is not operating for the entire quarter.

- (2) Records of all observations shall be maintained.
- (3) Visible emissions observations of air emission sources or enclosed facilities operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of air emission sources or enclosed facilities operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions shall be determined with each emissions outlet in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each emissions outlet during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.
- (4) Compliance Certification:
 - (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(7) and (a)(7)(A).
 - (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(7)(B) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.

C. For visible emissions from all other sources not specified in 30 TAC § 111.111(a)(1), (4), or (7); the permit holder shall comply with the following requirements:

- (i) Title 30 TAC § 111.111(a)(8)(A) (relating to Requirements for Specified Sources)
- (ii) Title 30 TAC § 111.111(a)(8)(B)(i) or (ii)
- (iii) For a source subject to 30 TAC § 111.111(a)(8)(A), complying with 30 TAC § 111.111(a)(8)(B)(i) or (ii), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146:

- (1) An observation of visible emissions from a source which is required to comply with 30 TAC § 111.111(a)(8)(A) shall be conducted at least once during each calendar quarter unless the source is not operating for the entire quarter.
 - (2) Records of all observations shall be maintained.
 - (3) Visible emissions observations of sources operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of sources operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions shall be determined with each source in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each source during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.
 - (4) Compliance Certification:
 - (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(8) and (a)(8)(A)
 - (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(8)(B) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.
- D. Certification of opacity readers determining opacities under Method 9 (as outlined in 40 CFR Part 60, Appendix A) to comply with opacity monitoring requirements shall be accomplished by completing the Visible Emissions Evaluators Course, or approved agency equivalent, no more than 180 days before the opacity reading.
- E. For emission units with contributions from uncombined water, the permit holder shall comply with the requirements of 30 TAC § 111.111(b).

- F. Emission limits on nonagricultural processes, except for the steam generators specified in 30 TAC § 111.153, shall comply with the following requirements:
 - (i) Emissions of PM from any source may not exceed the allowable rates as required in 30 TAC § 111.151(a) (relating to Allowable Emissions Limits)
 - (ii) Sources with an effective stack height (h_e) less than the standard effective stack height (H_e), must reduce the allowable emission level by multiplying it by $[h_e/H_e]^2$ as required in 30 TAC § 111.151(b)
 - (iii) Effective stack height shall be calculated by the equation specified in 30 TAC § 111.151(c)
 - G. Outdoor burning, as stated in 30 TAC § 111.201, shall not be authorized unless the following requirements are satisfied:
 - (i) Title 30 TAC § 111.205 (relating to Exception for Fire Training)
 - (ii) Title 30 TAC § 111.207 (relating to Exception for Recreation, Ceremony, Cooking, and Warmth)
 - (iii) Title 30 TAC § 111.219 (relating to General Requirements for Allowable Outdoor Burning)
 - (iv) Title 30 TAC § 111.221 (relating to Responsibility for Consequences of Outdoor Burning)
4. Permit holder shall comply with the following 30 TAC Chapter 115, Subchapter C requirements:
- A. When filling stationary gasoline storage containers with a nominal capacity less than or equal to 1,000 gallons at a Stage I motor vehicle fuel dispensing facility, the permit holder shall comply with the following requirements specified in 30 TAC Chapter 115, Subchapter C:
 - (i) Title 30 TAC § 115.222(3) (relating to Control Requirements), as it applies to liquid gasoline leaks, visible vapors, or significant odors
 - (ii) Title 30 TAC § 115.222(6) (relating to Control Requirements)
 - (iii) Title 30 TAC § 115.224(1) (relating to Inspection Requirements), as it applies to liquid gasoline leaks, visible vapors, or significant odors
5. The permit holder shall comply with the following 30 TAC Chapter 115, Subchapter F requirements (relating to Cutback Asphalt Requirements):
- A. Title 30 TAC § 115.512(1) (relating to Control Requirements)
 - B. Title 30 TAC § 115.512(2) (relating to Control Requirements)
 - C. Title 30 TAC § 115.512(3) (relating to Control Requirements)
 - D. Title 30 TAC § 115.515 (relating to Testing Requirements)
 - E. Title 30 TAC § 115.517(1) (relating to Exemptions), for long-life stockpiling

- F. Title 30 TAC § 115.517(2) (relating to Exemptions), for penetrating prime coat use only
- 6. The permit holder shall comply with the following requirements for units subject to any subpart of 40 CFR Part 60, unless otherwise stated in the applicable subpart:
 - A. Title 40 CFR § 60.7 (relating to Notification and Recordkeeping)
 - B. Title 40 CFR § 60.8 (relating to Performance Tests)
 - C. Title 40 CFR § 60.11 (relating to Compliance with Standards and Maintenance Requirements)
 - D. Title 40 CFR § 60.12 (relating to Circumvention)
 - E. Title 40 CFR § 60.13 (relating to Monitoring Requirements)
 - F. Title 40 CFR § 60.14 (relating to Modification)
 - G. Title 40 CFR § 60.15 (relating to Reconstruction)
 - H. Title 40 CFR § 60.19 (relating to General Notification and Reporting Requirements)
- 7. The permit holder shall comply with the requirements of 30 TAC Chapter 113, Subchapter C, § 113.100 for units subject to any subpart of 40 CFR Part 63, unless otherwise stated in the applicable subpart.
- 8. For each gasoline dispensing facility, with a throughput of less than 10,000 gallons per month as specified in 40 CFR Part 63, Subpart CCCCCC, the permit holder shall comply with the following requirements (Title 30 TAC, Subchapter C, § 113.1380 incorporated by reference):
 - A. Title 40 CFR § 63.11111(e), for records of monthly throughput
 - B. Title 40 CFR § 63.11111(i), for compliance due to increase of throughput
 - C. Title 40 CFR § 63.11111(j), for dispensing from fixed tank into portable tank for on-site delivery
 - D. Title 40 CFR § 63.11113(c), for compliance due to increase of throughput
 - E. Title 40 CFR § 63.11115(a), for operation of the source
 - F. Title 40 CFR § 63.11116(a) and (a)(1) - (4), for work practices
 - G. Title 40 CFR § 63.11116(b), for records availability
 - H. Title 40 CFR § 63.11116(d), for portable gasoline containers

Additional Monitoring Requirements

- 9. Unless otherwise specified, the permit holder shall comply with the compliance assurance monitoring requirements as specified in the attached "CAM Summary" upon issuance of the permit. In addition, the permit holder shall comply with the following:

- A. The permit holder shall comply with the terms and conditions contained in 30 TAC § 122.147 (General Terms and Conditions for Compliance Assurance Monitoring).
 - B. The permit holder shall report, consistent with the averaging time identified in the "CAM Summary," deviations as defined by the deviation limit in the "CAM Summary." Any monitoring data below a minimum limit or above a maximum limit, that is collected in accordance with the requirements specified in 40 CFR § 64.7(c), shall be reported as a deviation. Deviations shall be reported according to 30 TAC § 122.145 (Reporting Terms and Conditions).
 - C. The permit holder may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging time or minimum frequency specified in the "CAM Summary," for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in particular instances in order to avoid reporting deviations. All monitoring data shall be collected in accordance with the requirements specified in 40 CFR § 64.7(c).
 - D. The permit holder shall operate the monitoring, identified in the attached "CAM Summary," in accordance with the provisions of 40 CFR § 64.7.
 - E. The permit holder shall comply with the requirements of 40 CFR § 70.6(a)(3)(ii)(A) and 30 TAC § 122.144(1)(A)-(F) for documentation of all required inspections.
10. The permit holder shall comply with the periodic monitoring requirements as specified in the attached "Periodic Monitoring Summary" upon issuance of the permit. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permit holder shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. The permit holder may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging time or minimum frequency specified in the "Periodic Monitoring Summary," for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in particular instances to avoid reporting deviations. Deviations shall be reported according to 30 TAC § 122.145 (Reporting Terms and Conditions).

New Source Review Authorization Requirements

11. Permit holder shall comply with the requirements of New Source Review authorizations issued or claimed by the permit holder for the permitted area, including permits, permits by rule, standard permits, flexible permits, special permits, permits for existing facilities including Voluntary Emissions Reduction Permits and Electric Generating Facility Permits issued under 30 TAC Chapter 116, Subchapter I, or special exemptions referenced in the New Source Review Authorization References attachment. These requirements:
- A. Are incorporated by reference into this permit as applicable requirements
 - B. Shall be located with this operating permit
 - C. Are not eligible for a permit shield
12. The permit holder shall comply with the general requirements of 30 TAC Chapter 106, Subchapter A or the general requirements, if any, in effect at the time of the claim of any PBR.

13. The permit holder shall maintain records to demonstrate compliance with any emission limitation or standard that is specified in a permit by rule (PBR) or Standard Permit listed in the New Source Review Authorizations attachment. The records shall yield reliable data from the relevant time period that are representative of the emission unit's compliance with the PBR or Standard Permit. These records may include, but are not limited to, production capacity and throughput, hours of operation, safety data sheets (SDS), chemical composition of raw materials, speciation of air contaminant data, engineering calculations, maintenance records, fugitive data, performance tests, capture/control device efficiencies, direct pollutant monitoring (CEMS, COMS, or PEMS), or control device parametric monitoring. These records shall be made readily accessible and available as required by 30 TAC § 122.144. Any monitoring or recordkeeping data indicating noncompliance with the PBR or Standard Permit shall be considered and reported as a deviation according to 30 TAC § 122.145 (Reporting Terms and Conditions).

Compliance Requirements

14. The permit holder shall certify compliance in accordance with 30 TAC § 122.146. The permit holder shall comply with 30 TAC § 122.146 using at a minimum, but not limited to, the continuous or intermittent compliance method data from monitoring, recordkeeping, reporting, or testing required by the permit and any other credible evidence or information. The certification period may not exceed 12 months and the certification must be submitted within 30 days after the end of the period being certified.
15. Use of Discrete Emission Credits to comply with the applicable requirements:
- A. Unless otherwise prohibited, the permit holder may use discrete emission credits to comply with the following applicable requirements listed elsewhere in this permit:
 - (i) Title 30 TAC Chapter 115
 - (ii) Title 30 TAC Chapter 117
 - (iii) If applicable, offsets for Title 30 TAC Chapter 116
 - (iv) Temporarily exceed state NSR permit allowables
 - B. The permit holder shall comply with the following requirements in order to use the credit to comply with the applicable requirements:
 - (i) The permit holder must notify the TCEQ according to 30 TAC § 101.376(d)
 - (ii) The discrete emission credits to be used must meet all the geographic, timeliness, applicable pollutant type, and availability requirements listed in 30 TAC Chapter 101, Subchapter H, Division 4
 - (iii) The executive director has approved the use of the discrete emission credits according to 30 TAC § 101.376(d)(1)(A)
 - (iv) The permit holder keeps records of the use of credits towards compliance with the applicable requirements in accordance with 30 TAC § 101.372(h) and 30 TAC Chapter 122
 - (v) Title 30 TAC § 101.375 (relating to Emission Reductions Achieved Outside the United States)

Protection of Stratospheric Ozone

16. Permit holders at a site subject to Title VI of the FCAA Amendments shall meet the following requirements for protection of stratospheric ozone:
 - A. Any on site servicing, maintenance, and repair on refrigeration and nonmotor vehicle air-conditioning appliances using ozone-depleting refrigerants or non-exempt substitutes shall be conducted in accordance with 40 CFR Part 82, Subpart F. Permit holders shall ensure that repairs on or refrigerant removal from refrigeration and nonmotor vehicle air-conditioning appliances using ozone-depleting refrigerants are performed only by properly certified technicians using certified equipment. Records shall be maintained as required by 40 CFR Part 82, Subpart F.

Temporary Fuel Shortages (30 TAC § 112.15)

17. The permit holder shall comply with the following 30 TAC Chapter 112 requirements:
 - A. Title 30 TAC § 112.15 (relating to Temporary Fuel Shortage Plan Filing Requirements)
 - B. Title 30 TAC § 112.16(a), (a)(1), and (a)(2)(B) - (C) (relating to Temporary Fuel Shortage Plan Operating Requirements)
 - C. Title 30 TAC § 112.17 (relating to Temporary Fuel Shortage Plan Notification Procedures)
 - D. Title 30 TAC § 112.18 (relating to Temporary Fuel Shortage Plan Reporting Requirements)

Permit Location

18. The permit holder shall maintain a copy of this permit and records related to requirements listed in this permit on site.

Permit Shield (30 TAC § 122.148)

19. A permit shield is granted for the emission units, groups, or processes specified in the attached "Permit Shield." Compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements listed in the attachment "Permit Shield." Permit shield provisions shall not be modified by the executive director until notification is provided to the permit holder. No later than 90 days after notification of a change in a determination made by the executive director, the permit holder shall apply for the appropriate permit revision to reflect the new determination. Provisional terms are not eligible for this permit shield. Any term or condition, under a permit shield, shall not be protected by the permit shield if it is replaced by a provisional term or condition or the basis of the term and condition changes.

Acid Rain Permit Requirements

20. For units STACK1, STACK2, STACK3 and STACK4 (identified on the Certificate of Representation as units STK1, STK2, STK3 and STK4), located at the affected source identified by ORIS code 55144, the designated representative and the owner or operator, as applicable, shall comply with the following Acid Rain Permit requirements.
 - A. General Requirements

- (i) Under 30 TAC § 122.12(1) and 40 CFR Part 72, the Acid Rain Permit requirements contained here are a separable portion of the Federal Operating Permit (FOP) and have an independent public comment process which may be separate from, or combined with the FOP.
- (ii) The owner and operator shall comply with the requirements of 40 CFR Part 72 and 40 CFR Part 76. Any noncompliance with the Acid Rain Permit will be considered noncompliance with the FOP and may be subject to enforcement action.
- (iii) The owners and operators of the affected source shall operate the source and the unit in compliance with the requirements of this Acid Rain Permit and all other applicable State and federal requirements.
- (iv) The owners and operators of the affected source shall comply with the General Terms and Conditions of the FOP that incorporates this Acid Rain Permit.
- (v) The term for the Acid Rain permit shall commence with the issuance of the FOP that incorporates the Acid Rain permit and shall be run concurrent with the remainder of the term of the FOP. Renewal of the Acid Rain permit shall coincide with the renewal of the FOP that incorporates the Acid Rain permit and subsequent terms shall be no more than five years from the date of renewal of the FOP and run concurrent with the permit term of the FOP.

B. Monitoring Requirements

- (i) The owners and operators, and the designated representative, of the affected source and each affected unit at the source shall comply with the monitoring requirements contained in 40 CFR Part 75.
- (ii) The emissions measurements recorded and reported in accordance with 40 CFR Part 75 and any other credible evidence shall be used to determine compliance by the affected source with the acid rain emissions limitations and emissions reduction requirements for SO₂ and NO_x under the ARP.
- (iii) The requirements of 40 CFR Part 75 shall not affect the responsibility of the owners and operators to monitor emission of other pollutants or other emissions characteristics at the unit under other applicable requirements of the FCAA Amendments (42 U.S.C. 7401, as amended November 15, 1990) and other terms and conditions of the operating permit for the source.

C. SO₂ emissions requirements

- (i) The owners and operators of each source and each affected unit at the source shall comply with the applicable acid rain emissions limitations for SO₂.
- (ii) As of the allowance transfer deadline the owners and operators of the affected source and each affected unit at the source shall hold, in the unit's compliance subaccount, allowances in an amount not less than the total annual emissions of SO₂ for the previous calendar year.
- (iii) Each ton of SO₂ emitted in excess of the acid rain emissions limitations for SO₂ shall constitute a separate violation of the FCAA amendments.

- (iv) An affected unit shall be subject to the requirements under (i) and (ii) of the SO₂ emissions requirements as follows:
 - (1) Starting January 1, 2000, an affected unit under 40 CFR § 72.6(a)(2); or
 - (2) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR Part 75, an affected unit under 40 CFR § 72.6(a)(3).
- (v) Allowances shall be held in, deducted from, or transferred into or among Allowance Tracking System accounts in accordance with the requirements of the ARP.
- (vi) An allowance shall not be deducted, for compliance with the requirements of this permit, in a calendar year before the year for which the allowance was allocated.
- (vii) An allowance allocated by the EPA Administrator or under the ARP is a limited authorization to emit SO₂ in accordance with the ARP. No provision of the ARP, Acid Rain permit application, this Acid Rain Permit, or an exemption under 40 CFR §§ 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (viii) An allowance allocated by the EPA Administrator under the ARP does not constitute a property right.

D. NO_x Emission Requirements

- (i) The owners and operators of the source and each affected unit at the source shall comply with the applicable acid rain emissions limitations for NO_x under 40 CFR Part 76.

E. Excess emissions requirements for SO₂ and NO_x.

- (i) The designated representative of an affected unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR Part 77.
- (ii) If an affected source has excess emissions in any calendar year shall, as required by 40 CFR Part 77:
 - (1) Pay, without demand, the penalty required and pay, upon demand, the interest on that penalty.
 - (2) Comply with the terms of an approved offset plan.

F. Recordkeeping and Reporting Requirements

- (i) Unless otherwise provided, the owners and operators of the affected source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the permitting authority or the EPA Administrator.
 - (1) The certificate of representation for the designated representative for the source and each affected unit and all documents that demonstrate the

truth of the statements in the certificate of representation, in accordance with 40 CFR § 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative.

- (2) All emissions monitoring information, in accordance with 40 CFR Part 75, provided that to the extent that 40 CFR Part 75 provides for a 3-year period for recordkeeping (rather than a five-year period cited in 30 TAC § 122.144), the 3-year period shall apply.
 - (3) Copies of all reports, compliance certifications, and other submissions and all records made or required under the ARP or relied upon for compliance certification.
 - (4) Copies of all documents used to complete an acid rain permit application and any other submission under the ARP or to demonstrate compliance with the requirements of the ARP.
- (ii) The designated representative of an affected source and each affected unit at the source shall submit the reports required under the ARP including those under 40 CFR Part 72, Subpart I and 40 CFR Part 75.

G. Liability

- (i) Any person who knowingly violates any requirement or prohibition of the ARP, a complete acid rain permit application, an acid rain permit, or a written exemption under 40 CFR §§ 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to FCAA § 113(c).
- (ii) Any person who knowingly makes a false, material statement in any record, submission, or report under the ARP shall be subject to criminal enforcement pursuant to FCAA § 113(c) and 18 U.S.C. 1001.
- (iii) No permit revision shall excuse any violation of the requirements of the ARP that occurs prior to the date that the revision takes effect.
- (iv) The affected source and each affected unit shall meet the requirements of the ARP contained in 40 CFR Parts 72 through 78.
- (v) Any provision of the ARP that applies to an affected source or the designated representative of an affected source shall also apply to the owners and operators of such source and of the affected units at the source.
- (vi) Any provision of the ARP that applies to an affected unit (including a provision applicable to the DR of an affected unit) shall also apply to the owners and operators of such unit. Except as provided under 40 CFR § 72.44 (Phase II repowering extension plans) and 40 CFR § 76.11 (NO_x averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR Part 75 (including 40 CFR §§ 75.16, 75.17, and 75.18), the owners and operators and the DR of one affected unit shall not be liable for any violation by any other affected unit of which they are not owners or operators or the DR and that is located at a source of which they are not owners or operators or the DR.

- (vii) Each violation of a provision of 40 CFR Parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or DR of such source or unit, shall be a separate violation of the FCAA Amendments.
- H. Effect on other authorities. No provision of the ARP, an acid rain permit application, an acid rain permit, or an exemption under 40 CFR §§ 72.7 or 72.8 shall be construed as:
- (i) Except as expressly provided in Title IV of the FCAA Amendments, exempting or excluding the owners and operators and, to the extent applicable, the DR of an affected source or affected unit from compliance with any other provision of the FCAA Amendments, including the provisions of Title I of the FCAA Amendments relating to applicable National Ambient Air Quality Standards or State Implementation Plans.
 - (ii) Limiting the number of allowances a unit can hold; provided, that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the FCAA Amendments.
 - (iii) Requiring a change of any kind in any state law regulating electric utility rates and charges, affecting any state law regarding such state regulation, or limiting such state regulation, including any prudence review requirements under such state law.
 - (iv) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
 - (v) Interfering with or impairing any program for competitive bidding for power supply in a state in which such program is established.
- I. The number of SO₂ allowances allocated by the EPA in 40 CFR Part 73 is enforceable only by the EPA Administrator.

Cross-State Air Pollution Rule (CSAPR) Trading Program Requirements

21. For units STACK1, STACK2, STACK3 and STACK4 (identified in the Certificate of Representation as units STK1, STK2, STK3 and STK4), located at the site identified by ORIS code 55144, the designated representative and the owner or operator, as applicable, shall comply with the following CSAPR requirements.
- A. General Requirements
 - (i) The owners and operators of the CSAPR NO_x Ozone Season Group 2 source and each CSAPR NO_x Ozone Season Group 2 unit at the source shall operate the source and the unit in compliance with the requirements of the CSAPR NO_x Ozone Season Group 2 Trading Program and all other applicable State and federal requirements.
 - (ii) The owners and operators of the CSAPR NO_x Ozone Season Group 2 source and each CSAPR NO_x Ozone Season Group 2 unit at the source shall comply with the requirements of 40 CFR Part 97, Subpart EEEEE for CSAPR NO_x Ozone Season Group 2 Trading Program, and with the General Terms and Conditions of the Federal Operating Permit (FOP) that incorporates the CSAPR requirements.
 - B. Description of CSAPR Monitoring Provisions

- (i) The CSAPR subject unit(s), and the unit-specific monitoring provisions at this source, are identified in the following paragraph(s). These unit(s) are subject to the requirements for the CSAPR NO_x Ozone Season Group 2 Trading Program.
 - (1) For unit(s) STACK1, STACK2, STACK3 and STACK4, the owners and operators shall comply with the continuous emission monitoring system or systems (CEMS) requirements pursuant to 40 CFR Part 75, Subpart H for NO_x, and with the excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D for heat input.
- (ii) The above description of the monitoring used by a unit does not change, create an exemption from, or otherwise affect the monitoring, recordkeeping, and reporting requirements applicable to the unit under 40 CFR §§ 97.830 through 97.835 (CSAPR NO_x Ozone Season Group 2 Trading Program). The monitoring, recordkeeping and reporting requirements applicable to each unit are included below in the standard conditions for the applicable CSAPR trading program.
- (iii) Owners and operators must submit to the Administrator a monitoring plan for each unit in accordance with 40 CFR §§ 75.53, 75.62 and 75.73, as applicable. The monitoring plan for each unit is available at the EPA's website at <https://www.epa.gov/airmarkets/clean-air-markets-monitoring-plans-part-75-sources>.
- (iv) Owners and operators that want to use an alternative monitoring system must submit to the Administrator a petition requesting approval of the alternative monitoring system in accordance with 40 CFR Part 75, Subpart E and 40 CFR § 75.66 and § 97.835 (CSAPR NO_x Ozone Season Group 2 Trading Program). The Administrator's response approving or disapproving any petition for an alternative monitoring system is available on the EPA's website at <https://www.epa.gov/airmarkets/part-75-petition-responses>.
- (v) Owners and operators that want to use an alternative to any monitoring, recordkeeping, or reporting requirement under 40 CFR §§ 97.830 through 97.834 (CSAPR NO_x Ozone Season Group 2 Trading Program) must submit to the Administrator a petition requesting approval of the alternative in accordance with 40 CFR § 75.66 and § 97.835 (CSAPR NO_x Ozone Season Group 2 Trading Program). The Administrator's response approving or disapproving any petition for an alternative to a monitoring, recordkeeping, or reporting requirement is available on the EPA's website at <https://www.epa.gov/airmarkets/part-75-petition-responses>.
- (vi) The descriptions of monitoring applicable to the unit(s) included above meet the requirement of 40 CFR §§ 97.830 through 97.834 (CSAPR NO_x Ozone Season Group 2 Trading Program), and therefore procedures for minor permit revisions, in accordance with 30 TAC § 122.217, may be used to add or change this unit's monitoring system description.

22. CSAPR NO_x Ozone Season Group 2 Trading Program Requirements (40 CFR § 97.806)

A. Designated representative requirements

- (i) The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 40 CFR §§ 97.813 through 97.818.

B. Emissions monitoring, reporting, and recordkeeping requirements

- (i) The owners and operators, and the designated representative, of each CSAPR NO_x Ozone Season Group 2 source and each CSAPR NO_x Ozone Season Group 2 unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR § 97.830 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), § 97.831 (initial monitoring system certification and recertification procedures), § 97.832 (monitoring system out-of-control periods), § 97.833 (notifications concerning monitoring), § 97.834 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and § 97.835 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).
- (ii) The emissions data determined in accordance with 40 CFR § 97.830 through § 97.835 and any other credible evidence shall be used to calculate allocations of CSAPR NO_x Ozone Season Group 2 allowances under 40 CFR §§ 97.811(a)(2) and (b) and § 97.812 and to determine compliance with the CSAPR NO_x Ozone Season Group 2 emissions limitation and assurance provisions under paragraph C. below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR §§ 97.830 through 97.835 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

C. NO_x emissions requirements

- (i) CSAPR NO_x Ozone Season Group 2 emissions limitation
 - (1) As of the allowance transfer deadline for a control period in a given year, the owners and operators of each CSAPR NO_x Ozone Season Group 2 source and each CSAPR NO_x Ozone Season Group 2 unit at the source shall hold, in the source's compliance account, CSAPR NO_x Ozone Season Group 2 allowances available for deduction for such control period under 40 CFR § 97.824(a) in an amount not less than the tons of total NO_x emissions for such control period from all CSAPR NO_x Ozone Season Group 2 units at the source.
 - (2) If total NO_x emissions during a control period in a given year from the CSAPR NO_x Ozone Season Group 2 units at a CSAPR NO_x Ozone Season Group 2 source are in excess of the CSAPR NO_x Ozone Season Group 2 emissions limitation set forth in paragraph C.(i)(1) above, then:
 - (a) The owners and operators of the source and each CSAPR NO_x Ozone Season Group 2 unit at the source shall hold the CSAPR NO_x Ozone Season Group 2 allowances required for deduction under 40 CFR § 97.824(d); and
 - (b) The owners and operators of the source and each CSAPR NO_x Ozone Season Group 2 unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control

period shall constitute a separate violation of 40 CFR Part 97, Subpart EEEEE and the Clean Air Act.

(ii) CSAPR NO_x Ozone Season Group 2 assurance provisions

- (1) If total NO_x emissions during a control period in a given year from all CSAPR NO_x Ozone Season Group 2 units at CSAPR NO_x Ozone Season Group 2 sources in the state exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such NO_x emissions during such control period exceeds the common designated representative's assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) CSAPR NO_x Ozone Season Group 2 allowances available for deduction for such control period under 40 CFR § 97.825(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR § 97.825(b), of multiplying -
 - (a) The quotient of the amount by which the common designated representative's share of such NO_x emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the state for such control period, by which each common designated representative's share of such NO_x emissions exceeds the respective common designated representative's assurance level; and
 - (b) The amount by which total NO_x emissions from all CSAPR NO_x Ozone Season Group 2 units at CSAPR NO_x Ozone Season Group 2 sources in the state for such control period exceed the state assurance level.
- (2) The owners and operators shall hold the CSAPR NO_x Ozone Season Group 2 allowances required under paragraph C.(ii)(1) above, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.
- (3) Total NO_x emissions from all CSAPR NO_x Ozone Season Group 2 units at CSAPR NO_x Ozone Season Group 2 sources in the state during a control period in a given year exceed the state assurance level if such total NO_x emissions exceed the sum, for such control period, of the state NO_x Ozone Season Group 2 trading budget under 40 CFR § 97.810(a) and the state's variability limit under 40 CFR § 97.810(b).
- (4) It shall not be a violation of 40 CFR Part 97, Subpart EEEEE or of the Clean Air Act if total NO_x emissions from all CSAPR NO_x Ozone Season Group 2 units at CSAPR NO_x Ozone Season Group 2 sources in the state during a control period exceed the state assurance level or if a common designated representative's share of total NO_x emissions from the CSAPR NO_x Ozone Season Group 2 units at CSAPR NO_x Ozone

Season Group 2 sources in the state during a control period exceeds the common designated representative's assurance level.

- (5) To the extent the owners and operators fail to hold CSAPR NO_x Ozone Season Group 2 allowances for a control period in a given year in accordance with paragraphs C.(ii)(1) through (3) above,
 - (a) The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and
 - (b) Each CSAPR NO_x Ozone Season Group 2 allowance that the owners and operators fail to hold for such control period in accordance with paragraphs C.(ii)(1) through (3) above and each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart EEEEE and the Clean Air Act.

(iii) Compliance periods

- (1) A CSAPR NO_x Ozone Season Group 2 unit shall be subject to the requirements under paragraph C.(i) above for the control period starting on the later of May 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR § 97.830(b) and for each control period thereafter.
- (2) A CSAPR NO_x Ozone Season Group 2 unit shall be subject to the requirements under paragraph C.(ii) above for the control period starting on the later of May 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR § 97.830(b) and for each control period thereafter.

(iv) Vintage of allowances held for compliance

- (1) A CSAPR NO_x Ozone Season Group 2 allowance held for compliance with the requirements under paragraph C.(i)(1) above for a control period in a given year must be a CSAPR NO_x Ozone Season Group 2 allowance that was allocated for such control period or a control period in a prior year.
- (2) A CSAPR NO_x Ozone Season Group 2 allowance held for compliance with the requirements under paragraphs C.(i)(2)(a) and (ii)(1) through (3) above for a control period in a given year must be a CSAPR NO_x Ozone Season Group 2 allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.

(v) Allowance Management System requirements. Each CSAPR NO_x Ozone Season Group 2 allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR Part 97, Subpart EEEEE.

(vi) Limited authorization. A CSAPR NO_x Ozone Season Group 2 allowance is a limited authorization to emit one ton of NO_x during the control period in one year. Such authorization is limited in its use and duration as follows:

- (1) Such authorization shall only be used in accordance with the CSAPR NO_x Ozone Season Group 2 Trading Program; and
 - (2) Notwithstanding any other provision of 40 CFR Part 97, Subpart EEEEE, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.
- (vii) Property right. A CSAPR NO_x Ozone Season Group 2 allowance does not constitute a property right.

D. FOP revision requirements

- (i) No FOP revision shall be required for any allocation, holding, deduction, or transfer of CSAPR NO_x Ozone Season Group 2 allowances in accordance with 40 CFR Part 97, Subpart EEEEE.
- (ii) This FOP incorporates the CSAPR emissions monitoring, recordkeeping and reporting requirements pursuant to 40 CFR §§ 97.830 through 97.835, and the requirements for a continuous emission monitoring system (pursuant to 40 CFR Part 75, subpart H), an excepted monitoring system (pursuant to 40 CFR Part 75, appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to 40 CFR § 75.19), and an alternative monitoring system (pursuant to 40 CFR Part 75, subpart E). Therefore the Description of CSAPR Monitoring Provisions for CSAPR subject unit(s) may be added to, or changed, in this FOP using procedures for minor permit revisions in accordance with 30 TAC § 122.217.

E. Additional recordkeeping and reporting requirements

- (i) Unless otherwise provided, the owners and operators of each CSAPR NO_x Ozone Season Group 2 source and each CSAPR NO_x Ozone Season Group 2 unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.
 - (1) The certificate of representation under 40 CFR § 97.816 for the designated representative for the source and each CSAPR NO_x Ozone Season Group 2 unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under 40 CFR § 97.816 changing the designated representative.
 - (2) All emissions monitoring information, in accordance with 40 CFR Part 97, Subpart EEEEE.
 - (3) Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the CSAPR NO_x Ozone Season Group 2 Trading Program.

- (ii) The designated representative of a CSAPR NO_x Ozone Season Group 2 source and each CSAPR NO_x Ozone Season Group 2 unit at the source shall make all submissions required under the CSAPR NO_x Ozone Season Group 2 Trading Program, except as provided in 40 CFR § 97.818. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under 30 TAC § 122.165.

F. Liability

- (i) Any provision of the CSAPR NO_x Ozone Season Group 2 Trading Program that applies to a CSAPR NO_x Ozone Season Group 2 source or the designated representative of a CSAPR NO_x Ozone Season Group 2 source shall also apply to the owners and operators of such source and of the CSAPR NO_x Ozone Season Group 2 units at the source.
- (ii) Any provision of the CSAPR NO_x Ozone Season Group 2 Trading Program that applies to a CSAPR NO_x Ozone Season Group 2 unit or the designated representative of a CSAPR NO_x Ozone Season Group 2 unit shall also apply to the owners and operators of such unit.

G. Effect on other authorities

- (i) No provision of the CSAPR NO_x Ozone Season Group 2 Trading Program or exemption under 40 CFR § 97.805 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a CSAPR NO_x Ozone Season Group 2 source or CSAPR NO_x Ozone Season Group 2 unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.

Attachments

Applicable Requirements Summary

Additional Monitoring Requirements

Permit Shield

New Source Review Authorization References

Applicable Requirements Summary

Unit Summary	24
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Note: A “none” entry may be noted for some emission sources in this permit’s “Applicable Requirements Summary” under the heading of “Monitoring and Testing Requirements” and/or “Recordkeeping Requirements” and/or “Reporting Requirements.” Such a notation indicates that there are no requirements for the indicated emission source as identified under the respective column heading(s) for the stated portion of the regulation when the emission source is operating under the conditions of the specified SOP Index Number. However, other relevant requirements pursuant to 30 TAC Chapter 122 including Recordkeeping Terms and Conditions (30 TAC § 122.144), Reporting Terms and Conditions (30 TAC § 122.145), and Compliance Certification Terms and Conditions (30 TAC § 122.146) continue to apply.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
COOL3	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R1111-01	30 TAC Chapter 111, Visible Emissions	No changing attributes.
COOL4	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R1111-01	30 TAC Chapter 111, Visible Emissions	No changing attributes.
ENG1	SRIC ENGINES	N/A	63ZZZZ	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
ENG2	SRIC ENGINES	N/A	63ZZZZ	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
ENG3	SRIC ENGINES	N/A	63ZZZZ	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
ENG4	SRIC ENGINES	N/A	63ZZZZ	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
ENG5	SRIC ENGINES	N/A	63ZZZZ	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
STACK1	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R1111-01	30 TAC Chapter 111, Visible Emissions	No changing attributes.
STACK1	STATIONARY TURBINES	N/A	60GG-01	40 CFR Part 60, Subpart GG	Fuel Supply = Stationary gas turbine is supplied its fuel without intermediate bulk storage., Fuel Type Fired = Natural gas meeting the definition in § 60.331(u)., Fuel Monitoring Schedule = Fuel meets the definition of natural gas in 40 CFR § 60.331(u) and is not monitored.
STACK1	STATIONARY TURBINES	N/A	60GG-02	40 CFR Part 60, Subpart GG	Fuel Supply = Stationary gas turbine is supplied its fuel from a bulk

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
					storage tank., Fuel Type Fired = Liquid fuel
STACK2	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R1111-01	30 TAC Chapter 111, Visible Emissions	No changing attributes.
STACK2	STATIONARY TURBINES	N/A	60GG-01	40 CFR Part 60, Subpart GG	Fuel Supply = Stationary gas turbine is supplied its fuel without intermediate bulk storage., Fuel Type Fired = Natural gas meeting the definition in § 60.331(u)., Fuel Monitoring Schedule = Fuel meets the definition of natural gas in 40 CFR § 60.331(u) and is not monitored.
STACK2	STATIONARY TURBINES	N/A	60GG-02	40 CFR Part 60, Subpart GG	Fuel Supply = Stationary gas turbine is supplied its fuel from a bulk storage tank., Fuel Type Fired = Liquid fuel
STACK3	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R1111-01	30 TAC Chapter 111, Visible Emissions	No changing attributes.
STACK3	STATIONARY TURBINES	N/A	60GG-01	40 CFR Part 60, Subpart GG	Fuel Supply = Stationary gas turbine is supplied its fuel without intermediate bulk storage., Fuel Type Fired = Natural gas meeting the definition in § 60.331(u)., Fuel Monitoring Schedule = Fuel meets the definition of natural gas in 40 CFR § 60.331(u) and is not monitored.
STACK3	STATIONARY TURBINES	N/A	60GG-02	40 CFR Part 60, Subpart GG	Fuel Supply = Stationary gas turbine is supplied its fuel from a bulk

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
					storage tank., Fuel Type Fired = Liquid fuel
STACK4	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R1111-01	30 TAC Chapter 111, Visible Emissions	No changing attributes.
STACK4	STATIONARY TURBINES	N/A	60GG-01	40 CFR Part 60, Subpart GG	Fuel Supply = Stationary gas turbine is supplied its fuel without intermediate bulk storage., Fuel Type Fired = Natural gas meeting the definition in § 60.331(u)., Fuel Monitoring Schedule = Fuel meets the definition of natural gas in 40 CFR § 60.331(u) and is not monitored.
STACK4	STATIONARY TURBINES	N/A	60GG-02	40 CFR Part 60, Subpart GG	Fuel Supply = Stationary gas turbine is supplied its fuel from a bulk storage tank., Fuel Type Fired = Liquid fuel

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
COOL3	EP	R1111-01	Opacity	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(C) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 15% averaged over a six minute period for any source with a total flow rate of at least 100,000 acfm unless a CEMS is installed.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None
COOL4	EP	R1111-01	Opacity	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(C) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 15% averaged over a six minute period for any source with a total flow rate of at least 100,000 acfm unless a CEMS is installed.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None
ENG1	EU	63ZZZZ	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6603(a)-Table2d.4 § 63.6595(a)(1) § 63.6605(a) § 63.6605(b) § 63.6625(e) § 63.6625(h) § 63.6625(i) § 63.6640(f)(1) § 63.6640(f)(2) § 63.6640(f)(2)(i) § 63.6640(f)(4) § 63.6640(f)(4)(i)	For each existing emergency stationary CI RICE and black start stationary CI RICE, located at an area source, you must comply with the requirements as specified in Table 2d.4.a-c.	§ 63.6625(f) § 63.6625(i) § 63.6640(a) § 63.6640(a)-Table6.9.a.i § 63.6640(a)-Table6.9.a.ii	§ 63.6625(i) § 63.6655(d) § 63.6655(e) § 63.6655(f) § 63.6660(a) § 63.6660(b) § 63.6660(c)	§ 63.6640(e) § 63.6650(f)
ENG2	EU	63ZZZZ	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6603(a)-Table2d.4 § 63.6595(a)(1) § 63.6605(a) § 63.6605(b) § 63.6625(e) § 63.6625(h) § 63.6625(i) § 63.6640(f)(1)	For each existing emergency stationary CI RICE and black start stationary CI RICE, located at an area source, you must comply with the requirements as specified in Table 2d.4.a-c.	§ 63.6625(f) § 63.6625(i) § 63.6640(a) § 63.6640(a)-Table6.9.a.i § 63.6640(a)-Table6.9.a.ii	§ 63.6625(i) § 63.6655(d) § 63.6655(e) § 63.6655(f) § 63.6660(a) § 63.6660(b) § 63.6660(c)	§ 63.6640(e) § 63.6650(f)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 63.6640(f)(2) § 63.6640(f)(2)(i) § 63.6640(f)(4) § 63.6640(f)(4)(i)				
ENG3	EU	63ZZZZ	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6603(a)- Table2d.4 § 63.6595(a)(1) § 63.6605(a) § 63.6605(b) § 63.6625(e) § 63.6625(h) § 63.6625(i) § 63.6640(f)(1) § 63.6640(f)(2) § 63.6640(f)(2)(i) § 63.6640(f)(4) § 63.6640(f)(4)(i)	For each existing emergency stationary CI RICE and black start stationary CI RICE, located at an area source, you must comply with the requirements as specified in Table 2d.4.a-c.	§ 63.6625(f) § 63.6625(i) § 63.6640(a) § 63.6640(a)- Table6.9.a.i § 63.6640(a)- Table6.9.a.ii	§ 63.6625(i) § 63.6655(d) § 63.6655(e) § 63.6655(f) § 63.6660(a) § 63.6660(b) § 63.6660(c)	§ 63.6640(e) § 63.6650(f)
ENG4	EU	63ZZZZ	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6603(a)- Table2d.4 § 63.6595(a)(1) § 63.6605(a) § 63.6605(b) § 63.6625(e) § 63.6625(h) § 63.6625(i) § 63.6640(f)(1) § 63.6640(f)(2) § 63.6640(f)(2)(i) § 63.6640(f)(4) § 63.6640(f)(4)(i)	For each existing emergency stationary CI RICE and black start stationary CI RICE, located at an area source, you must comply with the requirements as specified in Table 2d.4.a-c.	§ 63.6625(f) § 63.6625(i) § 63.6640(a) § 63.6640(a)- Table6.9.a.i § 63.6640(a)- Table6.9.a.ii	§ 63.6625(i) § 63.6655(d) § 63.6655(e) § 63.6655(f) § 63.6660(a) § 63.6660(b) § 63.6660(c)	§ 63.6640(e) § 63.6650(f)
ENG5	EU	63ZZZZ	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6603(a)- Table2d.4 § 63.6595(a)(1) § 63.6605(a) § 63.6605(b) § 63.6625(e) § 63.6625(h) § 63.6625(i)	For each existing emergency stationary CI RICE and black start stationary CI RICE, located at an area source, you must comply with the requirements as specified in Table 2d.4.a-c.	§ 63.6625(f) § 63.6625(i) § 63.6640(a) § 63.6640(a)- Table6.9.a.i § 63.6640(a)- Table6.9.a.ii	§ 63.6625(i) § 63.6655(d) § 63.6655(e) § 63.6655(f) § 63.6660(a) § 63.6660(b) § 63.6660(c)	§ 63.6640(e) § 63.6650(f)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 63.6640(f)(1) § 63.6640(f)(2) § 63.6640(f)(2)(i) § 63.6640(f)(4) § 63.6640(f)(4)(i)				
STACK1	EP	R1111-01	Opacity	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(C) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 15% averaged over a six minute period for any source with a total flow rate of at least 100,000 acfm unless a CEMS is installed.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None
STACK1	EU	60GG-01	SO ₂	40 CFR Part 60, Subpart GG	§ 60.333(b)	No stationary gas turbine shall burn any fuel which contains sulfur in excess of 0.8% by weight.	§ 60.334(h) [G]§ 60.334(h)(3)	None	None
STACK1	EU	60GG-01	NO _x	40 CFR Part 60, Subpart GG	§ 60.332(a)(1) § 60.332(a)(3)	No owner or operator shall discharge into the atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides in excess of the amount as determined from the specified equation.	[G]§ 60.335(a) § 60.335(b)(2) ** See CAM Summary	None	None
STACK1	EU	60GG-02	SO ₂	40 CFR Part 60, Subpart GG	§ 60.333(b)	No stationary gas turbine shall burn any fuel which contains sulfur in excess of 0.8% by weight.	§ 60.334(h) § 60.334(h)(1) § 60.334(i) § 60.334(i)(1) § 60.334(j) § 60.334(j)(2)(i) § 60.334(j)(2)(ii) § 60.335(b)(10) § 60.335(b)(10)(i)	§ 60.334(i) § 60.334(i)(1)	None
STACK1	EU	60GG-02	NO _x	40 CFR Part 60, Subpart GG	§ 60.332(a)(1) § 60.332(a)(3)	No owner or operator shall discharge into the	[G]§ 60.335(a) § 60.335(b)(2)	None	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides in excess of the amount as determined from the specified equation.	** See CAM Summary		
STACK2	EP	R1111-01	Opacity	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(C) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 15% averaged over a six minute period for any source with a total flow rate of at least 100,000 acfm unless a CEMS is installed.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None
STACK2	EU	60GG-01	SO ₂	40 CFR Part 60, Subpart GG	§ 60.333(b)	No stationary gas turbine shall burn any fuel which contains sulfur in excess of 0.8% by weight.	§ 60.334(h) [G]§ 60.334(h)(3)	None	None
STACK2	EU	60GG-01	NO _x	40 CFR Part 60, Subpart GG	§ 60.332(a)(1) § 60.332(a)(3)	No owner or operator shall discharge into the atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides in excess of the amount as determined from the specified equation.	[G]§ 60.335(a) § 60.335(b)(2) ** See CAM Summary	None	None
STACK2	EU	60GG-02	SO ₂	40 CFR Part 60, Subpart GG	§ 60.333(b)	No stationary gas turbine shall burn any fuel which contains sulfur in excess of 0.8% by weight.	§ 60.334(h) § 60.334(h)(1) § 60.334(i) § 60.334(i)(1) § 60.334(j) § 60.334(j)(2)(i) § 60.334(j)(2)(ii) § 60.335(b)(10) § 60.335(b)(10)(i)	§ 60.334(i) § 60.334(i)(1)	None
STACK2	EU	60GG-02	NO _x	40 CFR Part 60,	§ 60.332(a)(1)	No owner or operator shall	[G]§ 60.335(a)	None	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
				Subpart GG	§ 60.332(a)(3)	discharge into the atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides in excess of the amount as determined from the specified equation.	§ 60.335(b)(2) ** See CAM Summary		
STACK3	EP	R1111-01	Opacity	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(C) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 15% averaged over a six minute period for any source with a total flow rate of at least 100,000 acfm unless a CEMS is installed.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None
STACK3	EU	60GG-01	SO ₂	40 CFR Part 60, Subpart GG	§ 60.333(b)	No stationary gas turbine shall burn any fuel which contains sulfur in excess of 0.8% by weight.	§ 60.334(h) [G]§ 60.334(h)(3)	None	None
STACK3	EU	60GG-01	NO _x	40 CFR Part 60, Subpart GG	§ 60.332(a)(1) § 60.332(a)(3)	No owner or operator shall discharge into the atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides in excess of the amount as determined from the specified equation.	[G]§ 60.335(a) § 60.335(b)(2) ** See CAM Summary	None	None
STACK3	EU	60GG-02	SO ₂	40 CFR Part 60, Subpart GG	§ 60.333(b)	No stationary gas turbine shall burn any fuel which contains sulfur in excess of 0.8% by weight.	§ 60.334(h) § 60.334(h)(1) § 60.334(i) § 60.334(i)(1) § 60.334(j) § 60.334(j)(2)(i) § 60.334(j)(2)(ii) § 60.335(b)(10) § 60.335(b)(10)(i)	§ 60.334(i) § 60.334(i)(1)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
STACK3	EU	60GG-02	NO _x	40 CFR Part 60, Subpart GG	§ 60.332(a)(1) § 60.332(a)(3)	No owner or operator shall discharge into the atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides in excess of the amount as determined from the specified equation.	[G]§ 60.335(a) § 60.335(b)(2) ** See CAM Summary	None	None
STACK4	EP	R1111-01	Opacity	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(C) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 15% averaged over a six minute period for any source with a total flow rate of at least 100,000 acfm unless a CEMS is installed.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None
STACK4	EU	60GG-01	SO ₂	40 CFR Part 60, Subpart GG	§ 60.333(b)	No stationary gas turbine shall burn any fuel which contains sulfur in excess of 0.8% by weight.	§ 60.334(h) [G]§ 60.334(h)(3)	None	None
STACK4	EU	60GG-01	NO _x	40 CFR Part 60, Subpart GG	§ 60.332(a)(1) § 60.332(a)(3)	No owner or operator shall discharge into the atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides in excess of the amount as determined from the specified equation.	[G]§ 60.335(a) § 60.335(b)(2) ** See CAM Summary	None	None
STACK4	EU	60GG-02	SO ₂	40 CFR Part 60, Subpart GG	§ 60.333(b)	No stationary gas turbine shall burn any fuel which contains sulfur in excess of 0.8% by weight.	§ 60.334(h) § 60.334(h)(1) § 60.334(i) § 60.334(i)(1) § 60.334(j) § 60.334(j)(2)(i) § 60.334(j)(2)(ii) § 60.335(b)(10) § 60.335(b)(10)(i)	§ 60.334(i) § 60.334(i)(1)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
STACK4	EU	60GG-02	NO _x	40 CFR Part 60, Subpart GG	§ 60.332(a)(1) § 60.332(a)(3)	No owner or operator shall discharge into the atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides in excess of the amount as determined from the specified equation.	[G]§ 60.335(a) § 60.335(b)(2) ** See CAM Summary	None	None

Additional Monitoring Requirements

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CAM Summary

Unit/Group/Process Information	
ID No.: STACK1	
Control Device ID No.: SCR1	Control Device Type: Selective Catalytic Reduction (SCR)
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart GG	SOP Index No.: 60GG-01
Pollutant: NO _x	Main Standard: § 60.332(a)(1)
Monitoring Information	
Indicator: Nitrogen oxides concentration	
Minimum Frequency: Four times per hour	
Averaging Period: Four hour	
Deviation Limit: Greater than 115.8 ppmv NO _x when corrected to 15 percent oxygen, except during periods of start-up or shutdown.	
CAM Text: Use a continuous emission monitoring system (CEMS) to measure and record the concentration of nitrogen oxides from the combustion turbine generator stack. The CEMS shall be operated in accordance with Special Condition 11 (Continuous Determination of Compliance) of NSR permit 40040/PSDTX923.	

CAM Summary

Unit/Group/Process Information	
ID No.: STACK1	
Control Device ID No.: SCR1	Control Device Type: Selective Catalytic Reduction (SCR)
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart GG	SOP Index No.: 60GG-02
Pollutant: NO _x	Main Standard: § 60.332(a)(1)
Monitoring Information	
Indicator: Nitrogen oxides concentration	
Minimum Frequency: Four times per hour	
Averaging Period: Four hour	
Deviation Limit: Greater than 89 ppmv NO _x when corrected to 15 percent oxygen, except during periods of start-up or shutdown.	
CAM Text: Use a continuous emission monitoring system (CEMS) to measure and record the concentration of nitrogen oxides from the combustion turbine generator stack. The CEMS shall be operated in accordance with Special Condition 11 (Continuous Determination of Compliance) of NSR permit 40040/PSDTX923.	

CAM Summary

Unit/Group/Process Information	
ID No.: STACK2	
Control Device ID No.: SCR2	Control Device Type: Selective Catalytic Reduction (SCR)
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart GG	SOP Index No.: 60GG-01
Pollutant: NO _x	Main Standard: § 60.332(a)(1)
Monitoring Information	
Indicator: Nitrogen oxides concentration	
Minimum Frequency: Four times per hour	
Averaging Period: Four hour	
Deviation Limit: Greater than 115.8 ppmv NO _x when corrected to 15 percent oxygen, except during periods of start-up or shutdown.	
CAM Text: Use a continuous emission monitoring system (CEMS) to measure and record the concentration of nitrogen oxides from the combustion turbine generator stack. The CEMS shall be operated in accordance with Special Condition 11 (Continuous Determination of Compliance) of NSR permit 40040/PSDTX923.	

CAM Summary

Unit/Group/Process Information	
ID No.: STACK2	
Control Device ID No.: SCR2	Control Device Type: Selective Catalytic Reduction (SCR)
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart GG	SOP Index No.: 60GG-02
Pollutant: NO _x	Main Standard: § 60.332(a)(1)
Monitoring Information	
Indicator: Nitrogen oxides concentration	
Minimum Frequency: Four times per hour	
Averaging Period: Four hour	
Deviation Limit: Greater than 89 ppmv NO _x when corrected to 15 percent oxygen, except during periods of start-up or shutdown.	
CAM Text: Use a continuous emission monitoring system (CEMS) to measure and record the concentration of nitrogen oxides from the combustion turbine generator stack. The CEMS shall be operated in accordance with Special Condition 11 (Continuous Determination of Compliance) of NSR permit 40040/PSDTX923.	

CAM Summary

Unit/Group/Process Information	
ID No.: STACK3	
Control Device ID No.: SCR3	Control Device Type: Selective Catalytic Reduction (SCR)
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart GG	SOP Index No.: 60GG-01
Pollutant: NO _x	Main Standard: § 60.332(a)(1)
Monitoring Information	
Indicator: Nitrogen oxides concentration	
Minimum Frequency: Four times per hour	
Averaging Period: Four hour	
Deviation Limit: Greater than 115.8 ppmv NO _x when corrected to 15 percent oxygen, except during periods of start-up or shutdown.	
CAM Text: Use a continuous emission monitoring system (CEMS) to measure and record the concentration of nitrogen oxides from the combustion turbine generator stack. The CEMS shall be operated in accordance with Special Condition 11 (Continuous Determination of Compliance) of NSR permit 40040/PSDTX923.	

CAM Summary

Unit/Group/Process Information	
ID No.: STACK3	
Control Device ID No.: SCR3	Control Device Type: Selective Catalytic Reduction (SCR)
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart GG	SOP Index No.: 60GG-02
Pollutant: NO _x	Main Standard: § 60.332(a)(1)
Monitoring Information	
Indicator: Nitrogen oxides concentration	
Minimum Frequency: Four times per hour	
Averaging Period: Four hour	
Deviation Limit: Greater than 89 ppmv NO _x when corrected to 15 percent oxygen, except during periods of start-up or shutdown.	
CAM Text: Use a continuous emission monitoring system (CEMS) to measure and record the concentration of nitrogen oxides from the combustion turbine generator stack. The CEMS shall be operated in accordance with Special Condition 11 (Continuous Determination of Compliance) of NSR permit 40040/PSDTX923.	

CAM Summary

Unit/Group/Process Information	
ID No.: STACK4	
Control Device ID No.: SCR4	Control Device Type: Selective Catalytic Reduction (SCR)
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart GG	SOP Index No.: 60GG-01
Pollutant: NO _x	Main Standard: § 60.332(a)(1)
Monitoring Information	
Indicator: Nitrogen oxides concentration	
Minimum Frequency: Four times per hour	
Averaging Period: Four hour	
Deviation Limit: Greater than 115.8 ppmv NO _x when corrected to 15 percent oxygen, except during periods of start-up or shutdown.	
CAM Text: Use a continuous emission monitoring system (CEMS) to measure and record the concentration of nitrogen oxides from the combustion turbine generator stack. The CEMS shall be operated in accordance with Special Condition 11 (Continuous Determination of Compliance) of NSR permit 40040/PSDTX923.	

CAM Summary

Unit/Group/Process Information	
ID No.: STACK4	
Control Device ID No.: SCR4	Control Device Type: Selective Catalytic Reduction (SCR)
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart GG	SOP Index No.: 60GG-02
Pollutant: NO _x	Main Standard: § 60.332(a)(1)
Monitoring Information	
Indicator: Nitrogen oxides concentration	
Minimum Frequency: Four times per hour	
Averaging Period: Four hour	
Deviation Limit: Greater than 89 ppmv NO _x when corrected to 15 percent oxygen, except during periods of start-up or shutdown.	
CAM Text: Use a continuous emission monitoring system (CEMS) to measure and record the concentration of nitrogen oxides from the combustion turbine generator stack. The CEMS shall be operated in accordance with Special Condition 11 (Continuous Determination of Compliance) of NSR permit 40040/PSDTX923.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: COOL3	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-01
Pollutant: Opacity	Main Standard: § 111.111(a)(1)(C)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once per quarter	
Averaging Period: n/a	
Deviation Limit: Visible emissions, or Maximum opacity = 15% (6-minute average)	
<p>Periodic Monitoring Text: Visible emissions observations shall be made and recorded. Note that to properly determine the presence of visible emissions, all sources must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor.</p> <p>If visible emissions are observed, the permit holder shall report a deviation. As an alternative, the permit holder may determine the opacity consistent with Test Method 9, as soon as practicable, but no later than 24 hours after observing visible emissions. If a Test Method 9 is performed, the opacity limit is the corresponding opacity limit associated with the particulate matter standard in the underlying applicable requirement. If there is no corresponding opacity limit in the underlying applicable requirement, the maximum opacity will be established using the most recent performance test. If the result of the Test Method 9 is opacity above the corresponding opacity limit (associated with the particulate matter standard in the underlying applicable requirement or as identified as a result of a previous performance test to establish the maximum opacity limit), the permit holder shall report a deviation.</p>	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: COOL4	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-01
Pollutant: Opacity	Main Standard: § 111.111(a)(1)(C)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once per quarter	
Averaging Period: n/a	
Deviation Limit: Visible emissions, or Maximum opacity = 15% (6-minute average)	
<p>Periodic Monitoring Text: Visible emissions observations shall be made and recorded. Note that to properly determine the presence of visible emissions, all sources must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor.</p> <p>If visible emissions are observed, the permit holder shall report a deviation. As an alternative, the permit holder may determine the opacity consistent with Test Method 9, as soon as practicable, but no later than 24 hours after observing visible emissions. If a Test Method 9 is performed, the opacity limit is the corresponding opacity limit associated with the particulate matter standard in the underlying applicable requirement. If there is no corresponding opacity limit in the underlying applicable requirement, the maximum opacity will be established using the most recent performance test. If the result of the Test Method 9 is opacity above the corresponding opacity limit (associated with the particulate matter standard in the underlying applicable requirement or as identified as a result of a previous performance test to establish the maximum opacity limit), the permit holder shall report a deviation.</p>	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: STACK1	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-01
Pollutant: Opacity	Main Standard: § 111.111(a)(1)(C)
Monitoring Information	
Indicator: Fuel Type	
Minimum Frequency: Annually or at any time an alternate fuel is used	
Averaging Period: n/a	
<p>Deviation Limit: The presence of visible emissions unless an opacity test, as specified in §111.111(a)(1)(F), is performed and the source is determined to be in compliance. However, if the source is out of compliance, a deviation shall be reported.</p> <p>Periodic Monitoring Text: Record the type of fuel used by the unit. If an alternate fuel is fired, either alone or in combination with the specified gas, for a period greater than or equal to 24 consecutive hours it shall be considered and reported as a deviation or the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are observed. Any time an alternate fuel is fired for a period of greater than 7 consecutive days then visible emissions observations will be conducted no less than once per week. Documentation of all observations shall be maintained. If visible emissions are present during the firing of an alternate fuel, the permit holder shall either list this occurrence as a deviation or the permit holder may determine the opacity consistent with Test Method 9. Any opacity readings that are above the opacity limit from the underlying applicable requirement shall be reported as a deviation.</p>	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: STACK2	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-01
Pollutant: Opacity	Main Standard: § 111.111(a)(1)(C)
Monitoring Information	
Indicator: Fuel Type	
Minimum Frequency: Annually or at any time an alternate fuel is used	
Averaging Period: n/a	
<p>Deviation Limit: The presence of visible emissions unless an opacity test, as specified in §111.111(a)(1)(F), is performed and the source is determined to be in compliance. However, if the source is out of compliance, a deviation shall be reported.</p> <p>Periodic Monitoring Text: Record the type of fuel used by the unit. If an alternate fuel is fired, either alone or in combination with the specified gas, for a period greater than or equal to 24 consecutive hours it shall be considered and reported as a deviation or the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are observed. Any time an alternate fuel is fired for a period of greater than 7 consecutive days then visible emissions observations will be conducted no less than once per week. Documentation of all observations shall be maintained. If visible emissions are present during the firing of an alternate fuel, the permit holder shall either list this occurrence as a deviation or the permit holder may determine the opacity consistent with Test Method 9. Any opacity readings that are above the opacity limit from the underlying applicable requirement shall be reported as a deviation.</p>	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: STACK3	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-01
Pollutant: Opacity	Main Standard: § 111.111(a)(1)(C)
Monitoring Information	
Indicator: Fuel Type	
Minimum Frequency: Annually or at any time an alternate fuel is used	
Averaging Period: n/a	
<p>Deviation Limit: The presence of visible emissions unless an opacity test, as specified in §111.111(a)(1)(F), is performed and the source is determined to be in compliance. However, if the source is out of compliance, a deviation shall be reported.</p> <p>Periodic Monitoring Text: Record the type of fuel used by the unit. If an alternate fuel is fired, either alone or in combination with the specified gas, for a period greater than or equal to 24 consecutive hours it shall be considered and reported as a deviation or the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are observed. Any time an alternate fuel is fired for a period of greater than 7 consecutive days then visible emissions observations will be conducted no less than once per week. Documentation of all observations shall be maintained. If visible emissions are present during the firing of an alternate fuel, the permit holder shall either list this occurrence as a deviation or the permit holder may determine the opacity consistent with Test Method 9. Any opacity readings that are above the opacity limit from the underlying applicable requirement shall be reported as a deviation.</p>	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: STACK4	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-01
Pollutant: Opacity	Main Standard: § 111.111(a)(1)(C)
Monitoring Information	
Indicator: Fuel Type	
Minimum Frequency: Annually or at any time an alternate fuel is used	
Averaging Period: n/a	
<p>Deviation Limit: The presence of visible emissions unless an opacity test, as specified in §111.111(a)(1)(F), is performed and the source is determined to be in compliance. However, if the source is out of compliance, a deviation shall be reported.</p> <p>Periodic Monitoring Text: Record the type of fuel used by the unit. If an alternate fuel is fired, either alone or in combination with the specified gas, for a period greater than or equal to 24 consecutive hours it shall be considered and reported as a deviation or the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are observed. Any time an alternate fuel is fired for a period of greater than 7 consecutive days then visible emissions observations will be conducted no less than once per week. Documentation of all observations shall be maintained. If visible emissions are present during the firing of an alternate fuel, the permit holder shall either list this occurrence as a deviation or the permit holder may determine the opacity consistent with Test Method 9. Any opacity readings that are above the opacity limit from the underlying applicable requirement shall be reported as a deviation.</p>	

Permit Shield

Permit Shield 50

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
BOILER-WWT	N/A	40 CFR Part 60, Subpart Dc	The unit has Maximum Design Heat Input Capacity less than 10 million BTU per hour.
BOILER-WWT	N/A	40 CFR Part 63, Subpart JJJJJJ	The unit is a gas-fired boiler, as defined in 63.11237.
COOL3	N/A	40 CFR Part 63, Subpart Q	The site and the unit are not a major source of HAPs.
COOL4	N/A	40 CFR Part 63, Subpart Q	The site and the unit are not a major source of HAPs.
DIESULOAD	N/A	30 TAC Chapter 115, Loading and Unloading of VOC	Facilities that unload diesel in Hays county are exempt from the requirements of this division.
ENG1	N/A	40 CFR Part 60, Subpart IIII	Engine constructed before July 11, 2005
ENG2	N/A	40 CFR Part 60, Subpart IIII	Engine constructed before July 11, 2005
ENG3	N/A	40 CFR Part 60, Subpart IIII	Engine constructed before July 11, 2005
ENG4	N/A	40 CFR Part 60, Subpart IIII	Engine constructed before July 11, 2005
ENG5	N/A	40 CFR Part 60, Subpart IIII	FW Pump - Engine constructed before July 1, 2006
MAINTPAINT	N/A	40 CFR Part 63, Subpart HHHHHH	The site does not use methylene chloride to conduct paint stripping operations, nor does the site conduct any painting other than for facility maintenance as defined in 63.11180.
MAINTPAINT	N/A	40 CFR Part 63, Subpart MMMM	The site is not a major source of HAPs.
OILRES1	N/A	40 CFR Part 60, Subpart Kb	The oil reservoir is a process tank and is therefore excluded from the definition of storage vessels in 60.111b.

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
OILRES2	N/A	40 CFR Part 60, Subpart Kb	The oil reservoir is a process tank and is therefore excluded from the definition of storage vessels in 60.111b.
OILRES3	N/A	40 CFR Part 60, Subpart Kb	The oil reservoir is a process tank and is therefore excluded from the definition of storage vessels in 60.111b.
OILRES4	N/A	40 CFR Part 60, Subpart Kb	The oil reservoir is a process tank and is therefore excluded from the definition of storage vessels in 60.111b.
PARTWASH	N/A	30 TAC Chapter 115, Degreasing Processes	The site uses a remote reservoir cold solvent cleaner that has drain area less than 16 in ² for a cleaning solvent that has a true vapor pressure less than or equal to 0.6 psia at 100 °F and disposes of waste solvent properly in enclosed container.
PARTWASH	N/A	40 CFR Part 63, Subpart T	The cleaner solvent contains less than 5% HAPs by weight.
STACK1	N/A	40 CFR Part 60, Subpart KKKK	The turbine is constructed prior to February 18, 2005.
STACK1	N/A	40 CFR Part 63, Subpart YYYY	The site is not a major source of HAPs.
STACK2	N/A	40 CFR Part 60, Subpart KKKK	The turbine is constructed prior to February 18, 2005.
STACK2	N/A	40 CFR Part 63, Subpart YYYY	The site is not a major source of HAPs.
STACK3	N/A	40 CFR Part 60, Subpart KKKK	The turbine is constructed prior to February 18, 2005.

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
STACK3	N/A	40 CFR Part 63, Subpart YYYY	The site is not a major source of HAPs.
STACK4	N/A	40 CFR Part 60, Subpart KKKK	The turbine is constructed prior to February 18, 2005.
STACK4	N/A	40 CFR Part 63, Subpart YYYY	The site is not a major source of HAPs.

New Source Review Authorization References

New Source Review Authorization References	54
New Source Review Authorization References by Emission Unit	55

New Source Review Authorization References

The New Source Review authorizations listed in the table below are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Prevention of Significant Deterioration (PSD) Permits	
PSD Permit No.: PSDTX923	Issuance Date: 06/18/2018
Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.	
Authorization No.: 40040	Issuance Date: 06/18/2018
Permits By Rule (30 TAC Chapter 106) for the Application Area	
Number: 106.183	Version No./Date: 09/04/2000
Number: 106.227	Version No./Date: 09/04/2000
Number: 106.263	Version No./Date: 11/01/2001
Number: 106.265	Version No./Date: 09/04/2000
Number: 106.371	Version No./Date: 09/04/2000
Number: 106.373	Version No./Date: 09/04/2000
Number: 106.412	Version No./Date: 09/04/2000
Number: 106.452	Version No./Date: 09/04/2000
Number: 106.454	Version No./Date: 11/01/2001
Number: 106.472	Version No./Date: 09/04/2000
Number: 106.473	Version No./Date: 09/04/2000
Number: 106.476	Version No./Date: 09/04/2000
Number: 106.511	Version No./Date: 09/04/2000
Number: 106.532	Version No./Date: 09/04/2000

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
BOILER-WWT	WASTEWATER TREATMENT PLANT BOILER	106.183/09/04/2000
COOL3	COOLING TOWER FOR UNIT 3	106.371/09/04/2000
COOL4	COOLING TOWER FOR UNIT 4	106.371/09/04/2000
DIESULOAD	DIESEL UNLOADING	106.472/09/04/2000
ENG1	EMERGENCY DIESEL GENERATOR 1	106.511/09/04/2000
ENG2	EMERGENCY DIESEL GENERATOR 2	106.511/09/04/2000
ENG3	EMERGENCY DIESEL GENERATOR 3	106.511/09/04/2000
ENG4	EMERGENCY DIESEL GENERATOR 4	106.511/09/04/2000
ENG5	EMERGENCY DIESEL FIRE WATER PUMP	106.511/09/04/2000
MAINTPAINT	MAINTENANCE PAINTING	106.263/11/01/2001
OILRES1	LUBE OIL RESERVOIR FOR UNIT 1	106.472/09/04/2000
OILRES2	LUBE OIL RESERVOIR FOR UNIT2	106.472/09/04/2000
OILRES3	LUBE OIL RESERVOIR FOR UNIT 3	106.472/09/04/2000
OILRES4	LUBE OIL RESERVOIR FOR UNIT 4	106.472/09/04/2000
PARTWASH	PART WASHER	106.454/11/01/2001
STACK1	COMBUSTION TURBINE UNIT 1	40040, PSDTX923
STACK1	COMBUSTION TURBINE UNIT 1 STACK	40040, PSDTX923
STACK2	COMBUSTION TURBINE UNIT 2	40040, PSDTX923
STACK2	COMBUSTION TURBINE UNIT 2 STACK	40040, PSDTX923
STACK3	COMBUSTION TURBINE UNIT 3	40040, PSDTX923
STACK3	COMBUSTION TURBINE UNIT 3 STACK	40040, PSDTX923

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
STACK4	COMBUSTION TURBINE UNIT 4	40040, PSDTX923
STACK4	COMBUSTION TURBINE UNIT 4 STACK	40040, PSDTX923

Appendix A

Acronym List 58

Acronym List

The following abbreviations or acronyms may be used in this permit:

ACFM	actual cubic feet per minute
AMOC	alternate means of control
ARP	Acid Rain Program
ASTM	American Society of Testing and Materials
B/PA	Beaumont/Port Arthur (nonattainment area)
CAM	Compliance Assurance Monitoring
CD	control device
CEMS	continuous emissions monitoring system
CFR	Code of Federal Regulations
COMS	continuous opacity monitoring system
CVS	closed vent system
D/FW	Dallas/Fort Worth (nonattainment area)
EP	emission point
EPA	U.S. Environmental Protection Agency
EU	emission unit
FCAA Amendments	Federal Clean Air Act Amendments
FOP	federal operating permit
gr/100 scf	grains per 100 standard cubic feet
HAP	hazardous air pollutant
H/G/B	Houston/Galveston/Brazoria (nonattainment area)
H ₂ S	hydrogen sulfide
ID No.	identification number
lb/hr	pound(s) per hour
MACT	Maximum Achievable Control Technology (40 CFR Part 63)
MMBtu/hr	Million British thermal units per hour
NA	nonattainment
N/A	not applicable
NADB	National Allowance Data Base
NESHAP	National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
NO _x	nitrogen oxides
NSPS	New Source Performance Standard (40 CFR Part 60)
NSR	New Source Review
ORIS	Office of Regulatory Information Systems
Pb	lead
PBR	Permit By Rule
PEMS	predictive emissions monitoring system
PM	particulate matter
ppmv	parts per million by volume
PRO	process unit
PSD	prevention of significant deterioration
psia	pounds per square inch absolute
SIP	state implementation plan
SO ₂	sulfur dioxide
TCEQ	Texas Commission on Environmental Quality
TSP	total suspended particulate
TVP	true vapor pressure
U.S.C.	United States Code
VOC	volatile organic compound

Appendix B

Major NSR Summary Table	60
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Major NSR Summary Table

Permit Number: 40040 and PSDTX923					Issuance Date: 06/18/2018		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Special Condition/ Application Information	Spec. Cond./Appl. Info	Spec. Cond./Appl. Info
STACK1	Combustion Turbine Model ABBGT24 Natural Gas Firing Normal, Hold Point 2	NOx	34	--	6, 8, 10, 11, 12, 13, 14	8, 10, 11, 12, 13, 14, 20, 21	8, 10, 11, 22, 23
		CO	254	--			
		VOC	17.6	--			
		SO2	4.2	--			
		PM10	20	--			
		NH3	25.2	--			
STACK1	ABBGT24 Natural Gas Firing Steam Injection Mode	NOx	34	--	6, 8, 10, 11, 12, 13, 14	8, 10, 11, 12, 13, 14, 20, 21	8, 10, 11, 22, 23
		CO	105	--			
		VOC	10	--			
		SO2	5.2	--			
		PM10	24.3	--			
		NH3	24.7	--			
STACK1	ABBGT24 Fuel Oil Firing	NOx	77	--	6, 8, 10, 11, 12, 13, 14	8, 10, 11, 12, 13, 14, 20, 21	8, 10, 11, 22, 23
		CO	310	--			
		VOC	18	--			
		SO2	111	--			
		PM10	112	--			
		NH3	31.1	--			
STACK1	ABB GT24 Startup and Shutdown Operation, and Transient Operation (5)(6)	NOx	990	--	11, 12, 13	11, 12, 13, 17, 18, 20, 21	11, 22, 23
		CO	2,100	--			
		VOC	132	--			
STACK1	ABB GT24 Maintenance/CT Tuning (5)(6)	CO	3,500	--	11, 12, 13	11, 12, 13, 18, 20, 21	11, 22, 23
STACK2	Combustion Turbine Model ABBGT24 Natural Gas Firing Normal, Hold Point 2	NOx	34	--	6, 8, 10, 11, 12, 13, 14	8, 10, 11, 12, 13, 14, 20, 21	8, 10, 11, 22, 23
		CO	254	--			
		VOC	17.6	--			
		SO2	4.2	--			
		PM10	20	--			
		NH3	25.2	--			
STACK2	ABBGT24	NOx	34	--	6, 8, 10, 11, 12, 13, 14	8, 10, 11, 12, 13, 14, 20, 21	8, 10, 11, 22, 23
		CO	105	--			

Major NSR Summary Table

Permit Number: 40040 and PSDTX923					Issuance Date: 06/18/2018		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Special Condition/ Application Information	Spec. Cond./Appl. Info	Spec. Cond./Appl. Info
	Natural Gas Firing Steam Injection Mode	VOC	10	--			
		SO2	5.2	--			
		PM10	24.3	--			
		NH3	24.7	--			
STACK2	ABBG24 Fuel Oil Firing	NOx	77	--	6, 8, 10, 11, 12, 13, 14	8, 10, 11, 12, 13, 14, 20, 21	8, 10, 11, 22, 23
		CO	310	--			
		VOC	18	--			
		SO2	111	--			
		PM10	112	--			
		NH3	31.1	--			
STACK2	ABB GT24 Startup and Shutdown Operation, and Transient Operation (5)(6)	NOx	990	--	11, 12, 13	11, 12, 13, 17, 18, 20, 21	11, 22, 23
		CO	2,100	--			
		VOC	132	--			
STACK2	ABB GT24 Maintenance/CT Tuning (5)(6)	CO	3,500	--	11, 12, 13	11, 12, 13, 18, 20, 21	11, 22, 23
STACK3	Combustion Turbine Model ABBG24 Natural Gas Firing Normal, Hold Point 2	NOx	34	--	6, 8, 10, 11, 12, 13, 14	8, 10, 11, 12, 13, 14, 20, 21	8, 10, 11, 22, 23
		CO	254	--			
		VOC	17.6	--			
		SO2	4.2	--			
		PM10	20	--			
		NH3	25.2	--			
STACK3	ABBG24 Natural Gas Firing Steam Injection Mode	NOx	34	--	6, 8, 10, 11, 12, 13, 14	8, 10, 11, 12, 13, 14, 20, 21	8, 10, 11, 22, 23
		CO	105	--			
		VOC	10	--			

Major NSR Summary Table

Permit Number: 40040 and PSDTX923					Issuance Date: 06/18/2018		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Special Condition/ Application Information	Spec. Cond./Appl. Info	Spec. Cond./Appl. Info
		SO2	5.2	--			
		PM10	24.3	--			
		NH3	24.7	--			
STACK3	ABBGT24 Fuel Oil Firing	NOx	77	--	6, 8, 10, 11, 12, 13, 14	8, 10, 11, 12, 13, 14, 20, 21	8, 10, 11, 22, 23
		CO	310	--			
		VOC	18	--			
		SO2	111	--			
		PM10	112	--			
		NH3	31.1	--			
STACK3	ABB GT24 Startup and Shutdown Operation, and Transient Operation (5)(6)	NOx	990	--	11, 12, 13	11, 12, 13, 17, 18, 20, 21	11, 22, 23
		CO	2,100	--			
		VOC	132	--			
STACK3	ABB GT24 Maintenance/CT Tuning (5)(6)	CO	3,500	--	11, 12, 13	11, 12, 13, 18, 20, 21	11, 22, 23
STACK4	Combustion Turbine Model ABBGT24 Natural Gas Firing Normal, Hold Point 2	NOx	34	--	6, 8, 10, 11, 12, 13, 14	8, 10, 11, 12, 13, 14, 20, 21	8, 10, 11, 22, 23
		CO	254	--			
		VOC	17.6	--			
		SO2	4.2	--			
		PM10	20	--			
		NH3	25.2	--			
STACK4	ABBGT24 Natural Gas Firing Steam Injection Mode	NOx	34	--	6, 8, 10, 11, 12, 13, 14	8, 10, 11, 12, 13, 14, 20, 21	8, 10, 11, 22, 23
		CO	105	--			
		VOC	10	--			

Major NSR Summary Table

Permit Number: 40040 and PSDTX923					Issuance Date: 06/18/2018		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Special Condition/ Application Information	Spec. Cond./Appl. Info	Spec. Cond./Appl. Info
		SO2	5.2	--			
		PM10	24.3	--			
		NH3	24.7	--			
STACK4	ABBGT24 Fuel Oil Firing	NOx	77	--	6, 8, 10, 11, 12, 13, 14	8, 10, 11, 12, 13, 14, 20, 21	8, 10, 11, 22, 23
		CO	310	--			
		VOC	18	--			
		SO2	111	--			
		PM10	112	--			
		NH3	31.1	--			
STACK4	ABB GT24 Startup and Shutdown Operation, and Transient Operation (5)(6)	NOx	990	--	11, 12, 13	11, 12, 13, 17, 18, 20, 21	11, 22, 23
		CO	2,100	--			
		VOC	132	--			
STACK4	ABB GT24 Maintenance/CT Tuning (5)(6)	CO	3,500	--	11, 12, 13	11, 12, 13, 18, 20, 21	11, 22, 23
STACK1 STACK2 STACK3 STACK4	ABB GT24 Annual Emissions Includes all four CTs combined and all modes of operation.	NOx	--	611.2	8, 10, 11, 12, 13, 14	8, 10, 11, 12, 13, 14, 17, 18, 20, 21	8, 10, 11, 22, 23
		CO	--	865.9			
		VOC	--	132.4			
		SO2	--	213.2			
		PM10	--	478.4			
		NH3	--	418.8			
FUG	Site Fugitives (7)	VOC	0.29	1.27			
		NH4OH	0.15	0.65			
Vent No. 1	Lube Oil Reservoir Vapor Extractor	VOC	0.003	0.01			

Major NSR Summary Table

Permit Number: 40040 and PSDTX923					Issuance Date: 06/18/2018		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Special Condition/ Application Information	Spec. Cond./Appl. Info	Spec. Cond./Appl. Info
Vent No. 2	Lube Oil Reservoir Vapor Extractor	VOC	0.003	0.01			
Vent No. 3	Lube Oil Reservoir Vapor Extractor	VOC	0.003	0.01			
Vent No. 4	Lube Oil Reservoir Vapor Extractor	VOC	0.003	0.01			
MSS FUG	Inherently Low-Emitting Maintenance Activities (7)	NOx	<0.01	<0.01		18, 21	
		CO	0.04	0.01			
		VOC	21	1.1			
		PM/PM2.5/P M10	4.5	0.1			
		NH3	6.6	0.1			
IG1	Stack 1 Ammonia Injection Grid 1 (7)	NH3	<0.01	0.02	7	21	22
V1	Stack 1 Ammonia Vaporizer 1 (7)	NH3	<0.01	0.02	7	21	22
IG2	Stack 2 Ammonia Injection Grid 2 (7)	NH3	<0.01	0.02	7	21	22
V2	Stack 2 Ammonia Vaporizer 2 (7)	NH3	<0.01	0.02	7	21	22
IG3	Stack 3 Ammonia Injection Grid 3 (7)	NH3	<0.01	0.02	7	21	22
V3	Stack 3 Ammonia Vaporizer 3 (7)	NH3	<0.01	0.02	7	21	22
IG4	Stack 4 Ammonia Injection Grid 4 (7)	NH3	<0.01	0.02	7	21	22
V4	Stack 4 Ammonia Vaporizer 4 (7)	NH3	<0.01	0.02	7	21	22

- (1) Emission point identification – either specific equipment designation or emission point number from a plot plan.
- (2) Specific point source name. For fugitive sources, use area name or fugitive source name.
- (3)

NO _x	- total oxides of nitrogen
CO	- carbon monoxide
VOC	- volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
SO ₂	- sulfur dioxide
PM	- total particulate matter, suspended in the atmosphere, including PM ₁₀ and PM _{2.5}
PM ₁₀	- total particulate matter equal to or less than 10 microns in diameter, including PM _{2.5}
PM _{2.5}	- particulate matter equal to or less than 2.5 microns in diameter
NH ₃	- ammonia
NH ₄ OH	- ammonium hydroxide
- (4) Compliance with annual emission limits (tons per year) is based on a 12-month rolling period.
- (5) Hourly emissions shown are the only emissions that are higher than emissions during normal operations. Normal operations emission limits apply to pollutants not shown that are emitted during transient operation, CT maintenance, startup, and shutdown (MSS).
- (6) For CT MSS and transient operation CO emissions may exceed 2,100 lbs/hr no more than 50 hours per year for all turbines combined, but must never exceed 3,500 lbs/hr.
- (7) Emission rate is an estimate and is enforceable through compliance with the applicable special conditions and permit application representations.



Texas Commission on Environmental Quality Air Quality Permit

A Permit Is Hereby Issued To
Hays Energy, LLC
Authorizing the Construction and Operation of
Hays Energy Facility
Located at **San Marcos, Hays County, Texas**
Latitude 29° 46' 50" *Longitude* -97° 59' 22"

Permits: 40040 and PSDTX923

Revision Date: June 18, 2018

Expiration Date: April 6, 2019


For the Commission

1. **Facilities** covered by this permit shall be constructed and operated as specified in the application for the permit. All representations regarding construction plans and operation procedures contained in the permit application shall be conditions upon which the permit is issued. Variations from these representations shall be unlawful unless the permit holder first makes application to the Texas Commission on Environmental Quality (commission) Executive Director to amend this permit in that regard and such amendment is approved. [Title 30 Texas Administrative Code (TAC) Section 116.116 (30 TAC § 116.116)]¹
2. **Voiding of Permit.** A permit or permit amendment is automatically void if the holder fails to begin construction within 18 months of the date of issuance, discontinues construction for more than 18 months prior to completion, or fails to complete construction within a reasonable time. Upon request, the executive director may grant an 18-month extension. Before the extension is granted the permit may be subject to revision based on best available control technology, lowest achievable emission rate, and netting or offsets as applicable. One additional extension of up to 18 months may be granted if the permit holder demonstrates that emissions from the facility will comply with all rules and regulations of the commission, the intent of the Texas Clean Air Act (TCAA), including protection of the public's health and physical property; and (b)(1) the permit holder is a party to litigation not of the permit holder's initiation regarding the issuance of the permit; or (b)(2) the permit holder has spent, or committed to spend, at least 10 percent of the estimated total cost of the project up to a maximum of \$5 million. A permit holder granted an extension under subsection (b)(1) of this section may receive one subsequent extension if the permit holder meets the conditions of subsection (b)(2) of this section. [30 TAC § 116.120]
3. **Construction Progress.** Start of construction, construction interruptions exceeding 45 days, and completion of construction shall be reported to the appropriate regional office of the commission not later than 15 working days after occurrence of the event. [30 TAC § 116.115(b)(2)(A)]
4. **Start-up Notification.** The appropriate air program regional office shall be notified prior to the commencement of operations of the facilities authorized by the permit in such a manner that a representative of the commission may be present. The permit holder shall provide a separate notification for the commencement of operations for each unit of phased construction, which may involve a series of units commencing operations at different times. Prior to operation of the facilities authorized by the permit, the permit holder shall identify the source or sources of allowances to be utilized for compliance with Chapter 101, Subchapter H, Division 3 of this title (relating to Mass Emissions Cap and Trade Program). [30 TAC § 116.115(b)(2)(B)]
5. **Sampling Requirements.** If sampling is required, the permit holder shall contact the commission's Office of Compliance and Enforcement prior to sampling to obtain the proper data forms and procedures. All sampling and testing procedures must be approved by the executive director and coordinated with the regional representatives of the commission. The permit holder is also responsible for providing sampling facilities and conducting the sampling operations or contracting with an independent sampling consultant. [30 TAC § 116.115(b)(2)(C)]
6. **Equivalency of Methods.** The permit holder must demonstrate or otherwise justify the equivalency of emission control methods, sampling or other emission testing methods, and monitoring methods proposed as alternatives to methods indicated in the conditions of the permit. Alternative methods shall be applied for in writing and must be reviewed and approved by the executive director prior to their use in fulfilling any requirements of the permit. [30 TAC § 116.115(b)(2)(D)]
7. **Recordkeeping.** The permit holder shall maintain a copy of the permit along with records containing the information and data sufficient to demonstrate compliance with the permit, including production records and

operating hours; keep all required records in a file at the plant site. If, however, the facility normally operates unattended, records shall be maintained at the nearest staffed location within Texas specified in the application; make the records available at the request of personnel from the commission or any air pollution control program having jurisdiction in a timely manner; comply with any additional recordkeeping requirements specified in special conditions in the permit; and retain information in the file for at least two years following the date that the information or data is obtained. [30 TAC § 116.115(b)(2)(E)]

8. **Maximum Allowable Emission Rates.** The total emissions of air contaminants from any of the sources of emissions must not exceed the values stated on the table attached to the permit entitled "Emission Sources-- Maximum Allowable Emission Rates." [30 TAC § 116.115(b)(2)(F)] ¹
9. **Maintenance of Emission Control.** The permitted facilities shall not be operated unless all air pollution emission capture and abatement equipment is maintained in good working order and operating properly during normal facility operations. The permit holder shall provide notification in accordance with 30 TAC §101.201, 101.211, and 101.221 of this title (relating to Emissions Event Reporting and Recordkeeping Requirements; Scheduled Maintenance, Startup, and Shutdown Reporting and Recordkeeping Requirements; and Operational Requirements). [30 TAC§ 116.115(b)(2)(G)]
10. **Compliance with Rules.** Acceptance of a permit by an applicant constitutes an acknowledgment and agreement that the permit holder will comply with all rules and orders of the commission issued in conformity with the TCAA and the conditions precedent to the granting of the permit. If more than one state or federal rule or regulation or permit condition is applicable, the most stringent limit or condition shall govern and be the standard by which compliance shall be demonstrated. Acceptance includes consent to the entrance of commission employees and agents into the permitted premises at reasonable times to investigate conditions relating to the emission or concentration of air contaminants, including compliance with the permit. [30 TAC § 116.115(b)(2)(H)]
11. **This** permit may not be transferred, assigned, or conveyed by the holder except as provided by rule. [30 TAC § 116.110(e)]
12. **There** may be additional special conditions attached to a permit upon issuance or modification of the permit. Such conditions in a permit may be more restrictive than the requirements of Title 30 of the Texas Administrative Code. [30 TAC § 116.115(c)]
13. **Emissions** from this facility must not cause or contribute to "air pollution" as defined in Texas Health and Safety Code (THSC) §382.003(3) or violate THSC § 382.085. If the executive director determines that such a condition or violation occurs, the holder shall implement additional abatement measures as necessary to control or prevent the condition or violation.
14. **The** permit holder shall comply with all the requirements of this permit. Emissions that exceed the limits of this permit are not authorized and are violations of this permit. ¹

¹ Please be advised that the requirements of this provision of the general conditions may not be applicable to greenhouse gas emissions.

Special Conditions

Permit Numbers 40040 and PSDTX923

Emission Standards and Operating Specifications

1. This permit covers only those sources of emissions listed in the attached tables entitled "Emissions Sources - Maximum Allowable Emission Rates" (MAERT), "Attachment A", and "Attachment B" and those sources are limited to the emission limits and other conditions specified in the attached MAERT. This permit authorizes planned maintenance, startup, and shutdown (MSS) activities which comply with the emission limits in the MAERT. **(5/13)**
2. Four ABB (Alstom) Model GT24 Gas Combustion Turbines (CTs) with steam injection in combined cycle with heat recovery steam generators (HRSG) and steam turbines are authorized by this permit. Each combined cycle unit has a single electric generator rated at a nominal electric output capability of 275 megawatts. Each CT is directly connected to the generator shaft and the steam turbine is indirectly connected to the generator shaft using a clutch and transmission to match CT speed. The CTs may employ evaporative cooling or steam injection for power enhancement. The HRSGs do not have duct burners. **(5/13)**
 - A. The CTs are authorized for two modes of non-transient operation:
 - (1) Normal Operation - from 100 percent (%) to 45% of full load. Normal operation may extend to lower loads if nitrogen oxides (NO_x) emissions comply with the concentration limits of Special Condition No. 3 **(5/18)**
 - (2) Hold Point 2 - from 8% to 12% of full load.
 - B. The CTs are authorized for transient operation as follows:
 - (1) Start-up and shutdown, as defined in Special Condition No. 16. **(5/13)**
 - (2) In transition,
 - (a) increasing load from Hold Point 2 to Normal Operation; and
 - (b) decreasing load from Normal Operation to Hold Point 2. **(7/04)**
 - C. The CTs are authorized to operate for planned maintenance as described in Attachment B, subject to the conditions of this permit and the representations in the amendment application dated January 3, 2011, as subsequently updated. **(5/13)**
 - D. Steam injection must not exceed 2,000 hours per year per CT. **(6/01)**
3. The concentration of emissions from each CT while in the normal operating range as defined in Special Condition No. 2.A.(1) shall not exceed the following limits expressed in parts per million by volume (ppmv), dry, at 15% oxygen (O₂), on a block one-hour average. **(5/18)**

Concentration Limits During Normal CT Operation

Pollutant		Fuel	
		Natural Gas	Fuel Oil
NO _x		5	9
Carbon monoxide (CO) ¹		5	10
	with SI ²	29	

Pollutant		Fuel	
		Natural Gas	Fuel Oil
Volatile organic compounds (VOC) ^{1,3}		0.4	2.0
	with EC or SI ⁴	3.0	
Ammonia (NH ₃)		10	10

¹Limits apply during full load only. At less than full load, comply with the MAERT limits.

²Higher limit applies while using steam injection (SI).

³Defined as total hydrocarbons minus methane and ethane, calculated as propane.

⁴Higher limit applies while using evaporative cooling (EC) or SI.

A. The limits of this Special Condition do not apply to a CT operating:

- (1) at Hold Point 2, as defined in Special Condition No. 2.A.(2);
- (2) in transient operation, as described in Special Condition No. 2.B.; or
- (3) in maintenance modes, as described in Attachment B.

4. Fuel for the CTs:

A. Is limited to:

- (1) Pipeline-quality natural gas containing no more than 0.8 grain total sulfur per 100 dry standard cubic feet.
- (2) No. 2 fuel oil, fired only during emergencies, including, but not limited to, natural gas interruptions, and further limited to no more than:
 - (a) 0.05% total sulfur by weight; and
 - (b) 720 hours of firing annually for each CT.
- (3) The use of any other fuels is prohibited.

B. Upon request by the Executive Director of the Texas Commission on Environmental Quality (TCEQ) or any local air pollution control program having jurisdiction, the holder of this permit shall provide a sample and/or an analysis of the fuel fired in the CTs or shall allow air pollution control agency representatives to obtain a sample for analysis.

5. For normal operations, the NH₃ handled at the plant shall be in an aqueous solution stored in four tanks, each holding 14,000 gallons. **(6/01)**

A. As an emergency supply to the selective catalytic reduction (SCR) systems, anhydrous NH₃ may be stored in small cylinders (typical weight 150 pounds).

6. During normal operation (natural gas-fueled), the opacity of emissions from the CTs shall not exceed 5% averaged over a six-minute period, except during periods of MSS. During MSS activities, the opacity shall not exceed 15% averaged over a six-minute period. Observations shall be performed quarterly while the CTs are in operation. Observations shall be made at least 15 feet and no more than 0.25 mile from the emission point. If visible emissions are observed from the stack, the opacity shall be determined by the U.S. Environmental Protection Agency (EPA) Reference Method No. 9. If the opacity exceeds 5% during normal operation, or 15% during MSS

activity, corrective action to eliminate the source of visible emissions shall be taken promptly and documented within one week of first observation. **(5/13)**

7. Audio, visual, and olfactory (AVO) checks for NH₃ shall be made twice daily within the operating area. No later than one hour following detection of a leak, plant personnel shall take one or more of the following actions as appropriate: **(4/16)**
 - A. Locate and isolate the leak.
 - B. Commence repair or replacement of the leaking component as appropriate.
 - C. Use a leak collection/containment system to control the leak until repair or replacement can be made.

Federal Applicability

8. A. The four CTs shall comply with applicable requirements of the EPA regulations on Standards of Performance for New Stationary Sources (NSPS), Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), including: **(6/18)**
 - (1) Subpart A - General Conditions; and
 - (2) Subpart GG - Stationary Gas Turbines.
- B. The four emergency diesel generator engines and one diesel fire water pump engine shall comply with applicable requirements of maximum achievable control technology (MACT) standards in 40 CFR Part 63, Subpart ZZZZ for existing area sources of hazardous air pollutants.
- C. If any condition of this permit is more stringent than the regulations so incorporated, then for the purposes of complying with this permit, the permit shall govern and be the standard by which compliance shall be demonstrated.

Initial Determination of Compliance

9. Sampling ports and platforms shall be incorporated into the design of all exhaust stacks according to the specifications set forth in the attachment entitled "Chapter 2, Stack Sampling Facilities." Alternate sampling facility designs may be submitted for approval by the TCEQ Austin Regional Director. **(4/09)**
10. The holder of this permit shall perform stack sampling and other testing as required to establish the actual quantities of air contaminants being emitted into the atmosphere from each CT stack, identified as Emission Point Nos. (EPNs) STACK 1, STACK 2, STACK 3, and STACK 4, for each of the fuel firing modes: natural gas and No. 2 fuel oil. Sampling shall be conducted in accordance with the appropriate procedures of the TCEQ Sampling Procedures Manual and in accordance with the appropriate EPA Reference Method, to include condensable particulate for the concentration of particulate matter less than 10 microns in diameter (PM₁₀); Reference Method 8 or Reference Methods 6 or 6c for sulfur dioxide (SO₂); Reference Method 9 for opacity; Reference Method 10 for the concentration of CO; Reference Method 25A, modified to exclude methane and ethane, for the concentration of VOC (to measure total carbon as propane); Reference Method 20 for the concentrations of NO_x and O₂; and the EPA Conditional Test Method (CTM) 27 for NH₃; or by other equivalent methods approved by the TCEQ Austin Regional Director. **(4/09)**

Fuel sampling using the methods and procedures of 40 CFR § 60.334(h)(3)(i) may be conducted in lieu of stack sampling for SO₂. If fuel sampling is used, compliance with 40 CFR Part 60, Subpart GG, SO₂ limits shall be based on 100% conversion of the sulfur in the fuel to SO₂. Any deviations from those procedures must be approved by the Executive Director of the TCEQ prior to sampling. The TCEQ Executive Director or his designated representative shall be afforded the opportunity to observe all such sampling. **(4/09)**

The holder of this permit is responsible for providing sampling and testing facilities and conducting the sampling and testing operations at his/her expense.

- A. The TCEQ Austin Regional Office shall be contacted as soon as testing is scheduled but not less than 45 days prior to sampling to schedule a pretest meeting.

The notice shall include:

- (1) Date for pretest meeting.
- (2) Date sampling will occur.
- (3) Name of firm conducting sampling.
- (4) Type of sampling equipment to be used.
- (5) Method or procedure to be used in sampling.
- (6) Procedure used to determine CT loads during and after the sampling period.

The purpose of the pretest meeting is to review the necessary sampling and testing procedures, to provide the proper data forms for recording pertinent data, and to review the format procedures for submitting the test reports. A written proposed description of any deviation from sampling procedures specified in permit conditions or the TCEQ or the EPA sampling procedures shall be made available to the TCEQ prior to the pretest meeting. The TCEQ Austin Regional Director shall approve or disapprove of any deviation from specified sampling procedures. Requests to waive testing for any pollutant specified in this condition shall be submitted to the TCEQ Office of Air, Air Permits Division. Test waivers and alternate/equivalent procedure proposals for New Source Performance Standards testing which must have the EPA approval shall be submitted to the TCEQ Austin Regional Office. **(4/09)**

- B. Air emissions from each CT shall be tested while firing at full load for the ambient conditions and equipment capability at the time of testing, in each of the fuel firing modes: natural gas and fuel oil. The SCR systems will be in operation at the required capability at all times during testing. Air contaminants to be sampled and analyzed while at full load include (but are not limited to) NO_x, O₂, CO, NH₃, VOC, SO₂, PM₁₀, and opacity. Fuel sampling using the methods and procedures of 40 CFR § 60.335(b)(10) may be conducted in lieu of stack sampling for SO₂. **(5/13)**

If fuel oil capability is not available, then the CTs shall be retested within 60 days after fuel oil capability is available. **(5/13)**

- C. The VOC emissions shall be sampled and analyzed at or near 50% of base load for both the natural gas and fuel oil firing modes. The SCR and continuous emission monitoring systems (CEMS) will be in operation at the required capability during testing with the steam turbine clutch engaged to the generator shaft (normal operation) and with the measured load at the generator terminals including the capability added by operation of the steam turbine. Each tested load shall be identified in the sampling report. The CEMS-measured NO_x and CO

stack concentrations and mass emission rates shall be specified in the test report for each tested load. **(7/04)**

- D. Sampling of each CT shall occur within 60 days after achieving the maximum fuel firing rate at which the CT will be operated but no later than 180 days after initial start-up of each unit. Requests for an extension of this schedule shall be made in writing to and approved by the Director of the TCEQ Austin Regional Office. Additional sampling shall occur as may be required by the TCEQ or the EPA. **(7/00)**
- E. Within 60 days after the completion of the testing and sampling required herein, copies of the sampling report shall be distributed as follows: **(4/09)**
 - (1) One copy to the TCEQ Austin Regional Office.
 - (2) One copy to the EPA Region 6 Office, Dallas.
- F. It is noted that initial determination of compliance stack tests were completed on the following dates: **(5/13)**
 - (1) Unit 1 – January 28, 2002
 - (2) Unit 2 – August 16, 2001
 - (3) Unit 3 – January 16, 2002
 - (4) Unit 4 – May 21, 2002

Continuous Determination of Compliance

- 11. The holder of this permit shall install, calibrate, and maintain a CEMS to measure and record the in-stack concentration of NO_x, CO and diluent from each CT stack. If a NO_x CEMS is used in conjunction with Special Condition No. 14.B, this condition shall apply to it also. **(5/13)**
 - A. The NO_x and diluent CEMS shall meet the design and performance specifications, pass the field tests, and meet the installation requirements and the data analysis and reporting requirements specified in the applicable performance specifications in 40 CFR Part 75, Appendices A and B. The requirements of 40 CFR Part 75 Appendices A and B are deemed an acceptable alternative to the performance specifications and quality assurance requirements of 40 CFR Part 60. **(5/13)**
 - B. The CO CEMS shall meet the design and performance specifications, pass the field tests, and meet the installation requirements and the data analysis and reporting requirements specified in the applicable performance specifications in 40 CFR Part 60, Performance Specification 4. The CEMS shall meet the applicable quality assurance requirements specified in 40 CFR Part 60, Appendix F, Procedure 1, except that cylinder gas audits (CGA) conducted in four successive operating quarters may be used in lieu of the annual Relative Accuracy Test Audit. Quarterly CGAs shall be conducted at least 60 days apart. A CGA is not required in any non-operating quarter, defined as a quarter during which the CT operates less than 168 hours. Relative accuracy exceedances (as specified in 40 CFR Part 60, Appendix F), CGA exceedances of ±15% accuracy, and any CO CEMS downtime shall be reported to the TCEQ Austin Regional Director, and necessary corrective action shall be taken. Supplemental stack concentration measurements may be required at the discretion of the TCEQ Austin Regional Director. **(5/13)**

- C. The CEMS shall be zeroed and spanned daily, and corrective action taken when the 24-hour span drift exceeds two times the amounts specified in the applicable Performance Specification. **(5/13)**
 - D. For full operating hours, the monitoring data must be reduced to hourly average values at least once every day, using a minimum of four equally-spaced data points from each block one-hour period except for hours in which calibration checks, zero and span adjustments, system breakdowns, or repairs occur. For those hours, two valid data points separated by a minimum of 15 minutes (where the unit operates for more than one quadrant of an hour) will be sufficient to quality assure the hour. The individual average concentrations must be converted to units of the permit allowable emission rate in pounds per hour (lb/hr) at least once every day. Pound per hour data from each CT stack must be summed monthly to tons per year and used to determine compliance with the annual emission limits of this permit. **(5/13)**
 - E. During NO_x or CO analyzer over-scale events, a concentration value of twice the analyzer range will be substituted for each minute the analyzer is over-scaled. A valid hourly value will be the arithmetic average of all measured and substituted minutes in each clock hour. **(5/13)**
 - F. During fuel gas flow meter failure events, fuel flow rate values will be substituted for each hour the flow meter is out of service. The values will be derived from a fuel flow-to-load correlation curve for that unit from a representative quarter. **(5/13)**
 - G. All monitoring data and quality-assurance data shall be maintained by the source for a period of five years and shall be made available to the TCEQ Executive Director or his designated representative upon request. The data from the CEMS may, at the discretion of the TCEQ, be used to determine compliance with the conditions of this permit. **(5/13)**
 - H. The TCEQ Austin Regional Office shall be notified at least 30 days prior to any required RATA in order to provide them the opportunity to observe the testing.
 - I. The holder of this permit may request authorization from the Office of Air, Air Permits Division of the TCEQ to install a predictive emissions monitoring system (PEMS) in lieu of a CEMS and to include conditions for PEMS certification and operation in this permit. The applicant should include, at minimum, in the PEMS authorization request: a detailed description of the PEMS (including the hardware and software to be used); a description of how the PEMS model will be or was developed, accounting for the operating load range of the CTs; a complete listing of the input parameters used in developing the PEMS model; and, if available, a listing of the final input parameters to be used by the PEMS in predicting emissions.
12. If any emission monitor fails to meet specified performance, it shall be repaired or replaced as soon as reasonably possible, but no later than seven days after it was first detected by any employee at the facility unless written permission is obtained from the TCEQ Austin Regional Office which allows for a longer repair or replacement time. The holder of this permit shall develop an operation and maintenance program (including stocking necessary spare parts) to ensure that the continuous monitors are available as required.
13. The holder of this permit shall additionally install, calibrate, maintain, and operate continuous monitoring systems to monitor and record the average hourly natural gas consumption of the CTs. The systems shall be accurate to $\pm 2.0\%$ of the unit's maximum flow. **(5/13)**
14. Following the initial determination of compliance testing for NH₃ emission rates and stack concentrations (pursuant to Special Condition No. 10) or within 90 days of initial start-up, whichever

occurs first, the NH₃ concentration in each CT Stack shall be tested or calculated according to the method and frequency listed below.

- A. The NH₃ slip may be measured using a sorbent or stain tube device specific for NH₃ measurement in the 5 to 10 ppmv ranges. The frequency of sorbent or stain tube testing shall be daily for the first 15 days of operation, after which, the frequency may be reduced to biweekly (every two weeks) testing if operating procedures have been developed to prevent excess amounts of NH₃ from being introduced in the SCR unit and when operation of the SCR unit has been proven successful with regard to controlling NH₃ slip. Daily sorbent or stain tube testing shall continue or resume after the initial 15-day period if NH₃ is measured at or above 10 ppmv.
- B. As an approved alternative to sorbent or stain tube testing, the permit holder may install and operate a second NO_x CEMS probe located between the CTs and the SCR catalyst, upstream of the stack NO_x CEMS, which may be used in association with the SCR Catalyst efficiency and NH₃ injection rate to estimate NH₃ slip. This condition shall not be construed to set a minimum NO_x reduction efficiency on the SCR Unit.
- C. If the measured or calculated NH₃ slip concentration exceeds 8 ppmv at any time, the permit holder shall begin NH₃ testing by the EPA CTM 27, or approved equivalent, on a quarterly basis, in addition to biweekly sorbent or stain tube testing. The quarterly testing shall continue until such time as the SCR Unit Catalyst is replaced; or if the quarterly testing indicates NH₃ slip is 5 ppmv or less, the CTM 27 tests (or approved equivalent) may be suspended until sorbent or stain tube testing, or as calculated per paragraph B, again indicates 8 ppmv NH₃ slip or greater.

These results shall be recorded and used to determine compliance with Special Condition No. 3. Any other method used for measuring NH₃ slip shall require prior approval from the TCEQ Austin Regional Director. **(5/18)**

Maintenance, Startup, and Shutdown (5/13)

- 15. This permit authorizes emissions from the planned startup and shutdown of the CTs and the maintenance activities listed in Attachment A and Attachment B of this permit. Attachment A identifies the inherently low-emitting (ILE) planned maintenance activities that this permit authorizes to be performed. Attachment B identifies the non-ILE planned maintenance activities that this permit authorizes to be performed.
- 16. The holder of this permit shall operate the CTs and associated ancillary equipment in accordance with good air pollution control practice to minimize emissions during planned MSS activities.
- 17. Emissions during planned startup and shutdown activities for the CTs will be minimized by limiting the duration of operation in planned startup and shutdown mode as follows:
 - A. A planned startup for each CT shall not exceed 360 minutes. A planned startup is defined as the period that begins when natural gas is introduced into the CT and ends when the CT reaches 45% of full load. **(5/18)**
 - B. A planned shutdown for each CT shall not exceed 120 minutes. A planned shutdown is defined as the period that begins when the CT load decreases below 45% of full load or the load decreases below Hold Point 2, and ends when combustion is terminated in the CT, or when the CT recovers from an auto unload or runback.

18. Compliance with the emission limits for planned MSS activities identified in the MAERT attached to this permit shall be demonstrated as follows.
 - A. For ILE planned maintenance activities identified in Attachment A of this permit:
 - (1) The total emissions from all activities shall be considered to be no more than the estimated potential to emit for those activities that are represented in the permit application.
 - (2) The permit holder shall annually confirm the continued validity of the estimated potential-to-emit represented in the permit application for all activities.
 - B. For NO_x and CO emissions during planned CT MSS, the permit holder shall use the NO_x and CO CEMS in accordance with Special Condition No. 11 of this permit to demonstrate compliance.
 - C. For pollutants from CT MSS not measured using CEMS, the permit holder shall do the following.
 - (1) Determine the emissions of each pollutant listed on the MAERT of this permit from all occurrences of planned MSS activity by calculating the pollutant's hourly and monthly emissions using data related to the planned MSS activity identified in turbine operating records, work orders, or equivalent records and the emissions of the pollutant during the planned MSS activity, either
 - (a) as represented in the planned MSS permit application; or
 - (b) as determined with an appropriate method, including but not limited to any of the following methods, provided that the permit holder maintains appropriate records supporting such determination:
 - i. use of emission factor(s), facility-specific parameter(s), and/or engineering knowledge of the facility's operations;
 - ii. use of emissions data measured (by a CEMS or during emissions testing) during the same type of planned MSS activity occurring at or on a similar facility, and correlation of that data with the activity's or facility's relevant operating parameters;
 - iii. use of emissions testing data collected during a planned MSS activity occurring at or on the facility, and correlation of that data with the facility's or activity's relevant operating parameters, such as electric load, temperature, fuel input, or fuel sulfur content; or
 - iv. use of parametric monitoring system data applicable to the facility.
 - (2) For each calendar month, determine the emissions of each pollutant emitted that result from such planned MSS activities.
 - (3) Once monthly emissions have been determined for the 12 months following the issuance of the MSS permit amendment, begin comparing the rolling 12-month emissions for each pollutant to the applicable annual turbine emissions limit in the MAERT.
19. With the exception of the emission limits in the MAERT attached to this permit, the permit conditions relating to planned MSS activities do not become effective until 180 days after issuance of the permit amendment that added such conditions.

Recordkeeping

20. The following records shall be kept at the plant for the life of the permit. All records required in this permit shall be made available at the request of personnel from the TCEQ, the EPA, or any air pollution control agency with jurisdiction.
 - A. A copy of this permit.
 - B. Permit application dated November 25, 1998, and subsequent representations submitted to the TCEQ.
 - C. A complete copy of the testing reports and records of the initial performance testing completed pursuant to Special Condition No. 10 to demonstrate initial compliance.
 - D. Stack sampling results or other air emissions testing (other than CEMS data) that may be conducted on units authorized under this permit after the date of issuance of this permit.
 - E. The SCR catalyst unit maintenance records specifying frequency of NH₃ monitoring and dates of catalyst replacement.
21. The following information shall be maintained by the holder of this permit in a form suitable for inspection for a period of five years after collection and shall be made immediately available upon request to representatives of the TCEQ, the EPA, or any local air pollution control program having jurisdiction:
 - A. The CEMS data of NO_x, CO, and O₂ emissions from each CT stack to demonstrate compliance with the concentration limits in Special Condition No. 3 and mass emission rates listed in the MAERT. **(5/13)**
 - B. Raw data files of all CEMS data including calibration checks and adjustments and maintenance performed on these systems in a permanent form suitable for inspection.
 - C. Hours of steam injection to enhance the power output of each CT pursuant to Special Condition No. 2.
 - D. Records of hours of operation, average daily quantity of natural gas and No. 2 fuel oil fired, the number of hours fuel oil is fired each month, and the rolling 12-month total hours of oil fired for each CT pursuant to Special Condition No. 4. **(4/09)**
 - E. Records of the NH₃ measurements made pursuant to Special Condition No. 14. **(4/09)**
 - F. Records of the opacity measurements made pursuant to Special Condition No. 6. **(4/09)**
 - G. Records of CT tuning/optimization to demonstrate compliance with the CO emission limit in the MAERT. **(5/13)**
 - H. Records of CT startups and shutdowns to demonstrate compliance with Special Condition No. 17. **(5/13)**
 - I. Records of MSS activities and their emissions to demonstrate compliance with Special Condition No. 18. **(5/13)**
 - J. Records of twice daily AVO inspections of the ammonia injector, vaporizer, and storage system. **(4/16)**

Reporting

22. The holder of this permit shall submit, to the TCEQ Austin Regional Office and the Air Enforcement Branch of the EPA in Dallas, quarterly reports as described in 40 CFR § 60.7. Such reports are required for each emission unit which is required to be continuously monitored pursuant to this permit.
- A. The following reporting requirements apply specifically to 40 CFR 60 Subpart GG: **(5/13)**
- (1) At all times, including periods of startup, shutdown, and malfunction (SSM), 40 CFR § 60.11(d) requires affected units to be operated in a manner consistent with good air pollution control practice for minimizing emissions. Excess emissions which occur during SSM are to be reported to determine whether a facility's operation and maintenance procedures are consistent with good air pollution control practice for minimizing emissions. [Federal Register Vol. 71, July 6, 2006, p. 38488]
 - (2) According to 40 CFR § 60.8(c), "Operations during periods of SSM shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of SSM be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard." Because the applicable standard, Subpart GG, does not specify limits during SSM, emission limits are not applicable during SSM.
 - (3) "SSM" is U.S. EPA terminology not used in the TCEQ's MSS rules in Title 30 Texas Administrative Code (30 TAC) Chapter 101. The references to this terminology in (1) and (2) above are used to identify the reporting requirements under NSPS Subpart GG.
- B. In addition to the information specified in 40 CFR § 60.7(c), each report shall contain:
- (1) the hours of operation of the equipment authorized by this permit; **(4/09)**
 - (2) a report summary of the periods of non-complying emissions and CEMS downtimes by cause; and **(4/09)**
 - (3) the number of hours in which data substitution occurred due to analyzer over-scaling or fuel flow meter failure. Data substitution for these reasons does not constitute monitor downtime for reporting required by 40 CFR § 60.7(c). **(5/13)**
23. If the average NO_x or CO stack outlet concentration exceeds the concentration limit of Special Condition No. 3 or the short term mass emission rate exceeds the applicable limitation in the MAERT for more than: **(08/14)**
- A. one hour, the holder of this permit shall investigate and determine the reason for the exceedance and, if needed, make necessary repairs and/or adjustments as soon as possible; and
- B. 24 consecutive hours, the permit holder shall notify, within 48 hours, the TCEQ Austin Regional Office either verbally or with a written report detailing the cause of the increase in emissions and all efforts being made to correct the problem. **(5/13)**

Additional Permit Authorizations at Site

24. The following operations are authorized by permits-by-rule under 30 TAC: **(5/13)**

Operations Authorized by Permit-by-Rule (PBR)

Sources	PBR	Registration No./Date
Two dew point heaters and a zero discharge boiler	30 TAC § 106.183	None
Soldering, brazing and welding activities for maintenance and repairs	30 TAC § 106.227	None
Maintenance activities, including purging of natural gas from pipelines and CTs and abrasive blasting of immovable objects	30 TAC § 106.263	None
Hand-held and manually operated machines	30 TAC § 106.265	None
Two hot waste coolers, two air-cooled condensers, two air-cooled cooling water units, two wetted cooling towers	30 TAC § 106.371	None
Storage of pressurized gas cylinders containing industrial gases	30 TAC § 106.372	None
Refrigerants and the use of refrigeration systems	30 TAC § 106.373	None
Enclosed or glovebox abrasive blasting	30 TAC § 106.452(1)	None
Non-enclosed blasting of movable objects	30 TAC § 106.452(2)	Required
Remote reservoir degreasing unit	30 TAC § 106.454	None
Tanks to store diesel, lube oil, sulfuric acid and mineral oil	30 TAC § 106.472	None
Loading, unloading and storage of gasoline	30 TAC § 106.473	None
Pressure vessels	30 TAC § 106.476	None
Four 440-hp emergency generators and one 240-hp fire water pump	30 TAC § 106.511	None
Water treatment system and wastewater treatment by separation	30 TAC § 106.532	None

Date: May 25, 2018

Attachment A

ILE Planned Maintenance Activities at the Hays Energy Facility

Planned Maintenance Activity	EPN	Emissions					
		VOC	NO _x	CO	PM	SO ₂	NH ₃
Process-related building and turbine air-intake filter maintenance ¹	MSSFUG				x		
Catalyst handling and maintenance ²	MSSFUG				x		
Maintenance of reservoirs or storage tanks storing lube oil, fuel oil, or other material with vapor pressure <0.5 psia ³	MSSFUG	x					
Maintenance of storage vessels storing gasoline or other material with a vapor pressure >0.5 psia that does not require clearing to allow for entry of personnel ³	MSSFUG	x					
Ammonia storage tank/vessel maintenance, requiring clearing for personnel entry ³	MSSFUG						x
Sludge Management ⁴	MSSFUG	x					
Inspection, repair, replacement, adjusting, testing, and calibration of analytical equipment and process instruments, including sight glasses, meters, gauges, CEMS, and PEMS.	MSSFUG	x					
CEMS Calibration	MSSFUG		x	x			
Turbine washing - unit online	STACKs 1-4				x		
Small equipment and fugitive component repair/replacement in VOC service ⁵	MSSFUG	x					
Small equipment and fugitive component repair/replacement in NH ₃ service ⁶	MSSFUG						x
Gaseous fuel venting	MSSFUG	x					
Vacuum truck solids loading	MSSFUG				x		

Attachment A, continued

ILE Table Notes:

- (1) Includes, but is not limited to, process-related building air filters and CT air intake filters.
- (2) Includes, but is not limited to, replacement, cleaning, activation, and deactivation of SCR and oxidation catalysts.
- (3) Includes, but is not limited to, related emptying, degassing, and cleaning.
- (4) Includes, but is not limited to, management by vacuum truck/dewatering of materials in open pits and ponds, sumps, tanks and other closed or open vessels. Materials include water and sludge mixtures containing miscellaneous VOCs such as fuel oil, lube oil, and other waste oils.

- (5) Includes, but is not limited to:
 - i. repair/replacement of pumps, compressors, valves, pipes, flanges, transport lines, filters and screens in fuel oil, diesel oil, lube oil, and gasoline service; and
 - ii. vehicle and mobile equipment maintenance that may involve small VOC emissions, such as oil changes, transmission service, and hydraulic system service.
- (6) Includes, but is not limited to:
 - i. repair/replacement of pumps, compressors, valves, pipes, flanges, transport lines, filters and screens in NH₃ service; and
 - ii. off-line NO_x control device maintenance, including maintenance of the aqueous NH₃ systems associated with SCR systems.

Date: May 22, 2013

Attachment B

Non-ILE Planned Maintenance Activities at the Hays Energy Facility

Planned Maintenance Activity	EPNs	Emissions				
		VOC	NO _x	CO	PM ₁₀	SO ₂
CT Maintenance and Tuning ¹	STACK 1 STACK 2 STACK 3 STACK 4	x	x	x	x	x

¹Includes, but is not limited to, combustion tuning, temperature mapping following inspection, generator balancing, and gas turbine overspeed trip testing.

Date: April 6, 2016

Emission Sources - Maximum Allowable Emission Rates

Permit Numbers 40040 and PSDTX923

This table lists the maximum allowable emission rates and all sources of air contaminants on the applicant's property covered by this permit. The emission rates shown are those derived from information submitted as part of the application for permit and are the maximum rates allowed for these facilities, sources, and related activities. Any proposed increase in emission rates may require an application for a modification of the facilities covered by this permit.

Air Contaminants Data

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
STACK1	Combustion Turbine Model ABB GT24 Natural Gas Firing Normal, Hold Point 2	NO _x	34	--
		CO	254	--
		VOC	17.6	--
		SO ₂	4.2	--
		PM ₁₀	20	--
		NH ₃	25.2	--
	ABB GT24 Natural Gas Firing Steam Injection Mode	NO _x	34	--
		CO	105	--
		VOC	10	--
		SO ₂	5.2	--
		PM ₁₀	24.3	--
		NH ₃	24.7	--
	ABB GT24 Fuel Oil Firing	NO _x	77	--
		CO	310	--
		VOC	18	--
		SO ₂	111	--
		PM ₁₀	112	--
		NH ₃	31.1	--
	ABB GT24 Startup and Shutdown Operation , and Transient Operation (5)(6)	NO _x	990	--
		CO	2,100	--
		VOC	132	--
	ABB GT24 Maintenance/CT Tuning (5)(6)	CO	3,500	--

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
STACK2	Combustion Turbine Model ABB GT24 Natural Gas Firing Normal, Hold Point 2	NO _x	34	--
		CO	254	--
		VOC	17.6	--
		SO ₂	4.2	--
		PM ₁₀	20	--
		NH ₃	25.2	--
	ABB GT24 Natural Gas Firing Steam Injection Mode	NO _x	34	--
		CO	105	--
		VOC	10	--
		SO ₂	5.2	--
		PM ₁₀	24.3	--
		NH ₃	24.7	--
	ABB GT24 Fuel Oil Firing	NO _x	77	--
		CO	310	--
		VOC	18	--
		SO ₂	111	--
		PM ₁₀	112	--
		NH ₃	31.1	--
	ABB GT24 Startup and Shutdown Operation , and Transient Operation (5)(6)	NO _x	990	--
		CO	2,100	--
		VOC	132	--
	ABB GT24 Maintenance/CT Tuning (5)(6)	CO	3,500	--
STACK3	Combustion Turbine Model ABB GT24 Natural Gas Firing Normal, Hold Point 2	NO _x	34	--
		CO	254	--
		VOC	17.6	--
		SO ₂	4.2	--
		PM ₁₀	20	--
		NH ₃	25.2	--

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
STACK3	ABB GT24 Natural Gas Firing Steam Injection Mode	NO _x	34	--
		CO	105	--
		VOC	10	--
		SO ₂	5.2	--
		PM ₁₀	24.3	--
		NH ₃	24.7	--
	ABB GT24 Fuel Oil Firing	NO _x	77	--
		CO	310	--
		VOC	18	--
		SO ₂	111	--
		PM ₁₀	112	--
		NH ₃	31.1	--
	ABB GT24 Startup and Shutdown Operation , and Transient Operation (5)(6)	NO _x	990	--
		CO	2,100	--
		VOC	132	--
	ABB GT24 Maintenance/CT Tuning (5)(6)	CO	3,500	--
STACK4	Combustion Turbine Model ABB GT24 Natural Gas Firing Normal, Hold Point 2	NO _x	34	--
		CO	254	--
		VOC	17.6	--
		SO ₂	4.2	--
		PM ₁₀	20	--
		NH ₃	25.2	--
	ABB GT24 Natural Gas Firing Steam Injection Mode	NO _x	34	--
		CO	105	--
		VOC	10	--
		SO ₂	5.2	--
		PM ₁₀	24.3	--
		NH ₃	24.7	--

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
STACK4	ABB GT24 Fuel Oil Firing	NO _x	77	--
		CO	310	--
		VOC	18	--
		SO ₂	111	--
		PM ₁₀	112	--
		NH ₃	31.1	--
	ABB GT24 Startup and Shutdown Operation , and Transient Operation (5)(6)	NO _x	990	--
		CO	2,100	--
		VOC	132	--
	ABB GT24 Maintenance/CT Tuning (5)(6)	CO	3,500	--
STACK1 STACK2 STACK3 STACK4	ABB GT24 Annual Emissions Includes all four CTs combined and all modes of operation.	NO _x	--	611.2
		CO	--	865.9
		VOC	--	132.4
		SO ₂	--	213.2
		PM ₁₀	--	478.4
		NH ₃	--	418.8
FUG	Site Fugitives (7)	VOC	0.29	1.27
		NH ₄ OH	0.15	0.65
Vent No. 1	Lube Oil Reservoir Vapor Extractor	VOC	0.003	0.01
Vent No. 2	Lube Oil Reservoir Vapor Extractor	VOC	0.003	0.01
Vent No. 3	Lube Oil Reservoir Vapor Extractor	VOC	0.003	0.01
Vent No. 4	Lube Oil Reservoir Vapor Extractor	VOC	0.003	0.01
MSS FUG	Inherently Low-Emitting Maintenance Activities (7)	NO _x	<0.01	<0.01
		CO	0.04	0.01
		VOC	21	1.1
		PM	4.5	0.1
		PM ₁₀	4.5	0.1
		PM _{2.5}	4.5	0.1
		NH ₃	6.6	0.1

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
IG1	Stack 1 Ammonia Injection Grid 1 (7)	NH ₃	<0.01	0.02
V1	Stack 1 Ammonia Vaporizer 1 (7)	NH ₃	<0.01	0.02
IG2	Stack 2 Ammonia Injection Grid 2 (7)	NH ₃	<0.01	0.02
V2	Stack 2 Ammonia Vaporizer 2 (7)	NH ₃	<0.01	0.02
IG3	Stack 3 Ammonia Injection Grid 3 (7)	NH ₃	<0.01	0.02
V3	Stack 3 Ammonia Vaporizer 3 (7)	NH ₃	<0.01	0.02
IG4	Stack 4 Ammonia Injection Grid 4 (7)	NH ₃	<0.01	0.02
V4	Stack 4 Ammonia Vaporizer 4 (7)	NH ₃	<0.01	0.02

(1) Emission point identification - either specific equipment designation or emission point number from plot plan.

(2) Specific point source name. For fugitive sources, use area name or fugitive source name.

(3) NO_x - total oxides of nitrogen

CO - carbon monoxide

VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1

SO₂ - sulfur dioxide

PM - total particulate matter, suspended in the atmosphere, including PM₁₀ and PM_{2.5}

PM₁₀ - total particulate matter equal to or less than 10 microns in diameter, including PM_{2.5}

PM_{2.5} - particulate matter equal to or less than 2.5 microns in diameter

NH₃ - ammonia

NH₄OH - ammonium hydroxide

(4) Compliance with annual emission limits (tons per year) is based on a 12-month rolling period.

(5) Hourly emissions shown are the only emissions that are higher than emissions during normal operations. Normal operations emission limits apply to pollutants not shown that are emitted during transient operation, CT maintenance, startup, and shutdown (MSS).

(6) For CT MSS and transient operation CO emissions may exceed 2,100 lbs/hr no more than 50 hours per year for all turbines combined, but must never exceed 3,500 lbs/hr.

(7) Emission rate is an estimate and is enforceable through compliance with the applicable special conditions and permit application representations.

Date: May 25, 2018